APPLICATION FOR FINANCIAL ASSISTANCE

Revised 4/99

IMPORTANT: Please consul	lt the "Instructions	for Completing	the Project
Application" for assistance	<u>e in completion of t</u>	his form.	
SUBDIVISION: City	of Cincinnati	CODE # <u>06</u>	<u>1-15000</u>
DISTRICT NUMBER: 2	COUNTY: Ha	milton	DATE <u>09/09/08</u>
CONTACT: Becky Calder (THE PROJECT CONTACT PERSON SHOULD BE ANSWER OR COORDINATE THE RESPONSE TO FAX: (513) 591-7878 E-N	QUESTIONS)		
PROJECT NAME: Galbra	<u>iith Road Water Ma</u>	in Replacemen	t Project
SUBDIVISION TYPE (Check Only 1) 1.County X 2.City 3.Township 4.Village 5.Water/Sanitary District (Section 6119 or 6117	•	Amount)	PROJECT TYPE (Check Largest Component) 1.Road 2.Bridge/Culvert X 3.Water Supply 4.Wastewater 5.Solid Waste 6.Stormwater
TOTAL PROJECT COST: \$1,			JESTED: \$1,628,022
	DISTRICT RECOMM npleted by the Dist	rict Committee	
GRANT: \$_ SCIP LOAN: \$_ <i>I,626,623</i> RLP LOAN: \$_ (Check Only 1) X State Capital Improveme _ Local Transportation Imp	at Program	Smail	NCE: \$ <u>20 yrs.</u> <u>yrs.</u> I Government Program
	FOR OPWC USE	ONLY	
PROJECT NUMBER: C Local Participation	•	Loan Into %	ED FUNDING: \$ erest Rate:
OPWC Participation Project Release Date: OPWC Approval:		Loan Ter years Maturity Date Approved Loan	Date: :SCIP

1.0 PROJECT FINANCIAL INFORMATION

1.1	PROJECT ESTIMATED COSTS: (Round to Nearest Dollar)	
	(TOTAL DOLLARS
a.)	Basic Engineering Services:	\$.00
	Preliminary Design \$	
	Final Design \$	
	Bidding \$	
	Construction Phase \$	-
	Additional Engineering Services *Identify services and costs below.	\$ <u>.00</u>
b.)	Acquisition Expenses:	
	Land and/or Right of Way	\$.00
C.)	Construction Costs:	\$ <u>1,628,022.00</u>
d.)	Equipment Purchased Directly:	\$
e.)	Permits, Advertising, Legal: (Or Interest Costs for Loan Assistance Applications Only)	\$
f.)	Construction Contingencies:	\$ <u>.00</u>
g.)	TOTAL ESTIMATED COSTS:	\$ <u>1,628,022.00</u>
[‡] List	Additional Engineering Services here:	
Servi		•

Force Account

Dollars

1.2 PROJECT FINANCIAL RESOURCES: (Round to Nearest Dollar and Percent)

a.) b.)	Local In-Kind Contributions Local Revenues	DOLLARS \$\$00 \$1,628,022.00	%
·		Ψ <u>1,020,022.00</u>	<u>100%</u>
c.)	Other Public Revenues		
	ODOT	\$.00 _	
	Rural Development	\$ <u>.00</u>	
	OEPA	\$00	
	OWDA	\$	
	CDBG	\$	
	OTHER	\$	
	SUBTOTAL LOCAL RESOURCES:	\$ <u>.00</u>	
d.)	OPWC Funds		
	1. Grant	\$00	
	2. Loan	\$ 1,628,022.00	100%
	3. Loan Assistance	\$,000.00	<u> 100 70</u>
	SUBTOTAL OPWC FUNDS:	\$	
e.)	TOTAL FINANCIAL RESOURCES:	\$ <u>1,628,022.00</u>	100%

1.3 AVAILABILITY OF LOCAL FUNDS:

Attach a statement signed by the <u>Chief Financial Officer</u> listed in section 5.2 certifying <u>all local share</u> funds required for the project will be available on or before the earliest date listed in the Project Schedule section.

ODOT PID#	Sale Date:
STATUS: (Check one)	_
Traditional	
Local Plannin	g Agency (LPA
State Infrastr	

2.0 PROJECT INFORMATION

If the project is multi-jurisdictional, information must be consolidated in this section.

- 2.1 PROJECT NAME: Galbraith Road Water Main Replacement Project
- 2.2 BRIEF PROJECT DESCRIPTION (Sections A through C): A: SPECIFIC LOCATION:

This project is located on East Galbraith Road between Cross County Highway and Fontaine Ct. The project is in Hamilton County with a majority of the project is in Amberly Village and a small portion within the City of Reading. See attached the map for location of the water mains the project.

PROJECT ZIP CODE: 45236 & 45237

B: PROJECT COMPONENTS:

This project includes the replacement of an existing 8" distribution water main with new 12" "dual service" water main. The primary purpose of a "dual service" water main is to move larger volumes of water quickly to higher demand areas. The project also includes the installation of water branches, fire hydrants, valves and chambers in the right of way, disinfection, pressure testing and performing all other related work.

C: PHYSICAL DIMENSIONS:

This project involves the abandonment of an existing 8" water main and replacement with approximately 9330 feet of 12" ductile iron pipe in East Galbraith Road.

D: DESIGN SERVICE CAPACITY:

2.3

Detail current service capacity versus proposed service level.

This project is designed to meet existing and future water system demands.

Road or Bridge: Current ADT	Year: Pro	ojected ADT	: Year:
Water/Wastewater: Based on month attach current rate ordinance. Curr** See attached rate schedule**	ly usage of 7,756 g ent Residential Ra	gallons per ite:\$P	household, roposed Rate: \$
Stormwater: Number of households	served:		
USEFUL LIFE/COST ESTIMATE:	Project Useful	Life <u>:</u> 75	Years.

Attach <u>Registered Professional Engineer's</u> statement, with <u>original seal</u> and <u>signature</u> confirming the project's useful life indicated above and estimated cost.

4

3.0 REPAIR/REPLACEMENT or NEW/EXPANSION:

TOTAL PORTION OF PROJECT REPAIR/REPLACEMENT \$ 1,628,022.00

TOTAL PORTION OF PROJECT NEW/EXPANSION \$ 0.00

4.0 PROJECT SCHEDULE:*

		BEGIN DATE	END DATE
4.1	Engineering/Design:	11/1/2008	1/1/2009
4.2	Bid Advertisement and Award:	2/1/2009	3/1/2009
4.3	Construction:	4/1/2009	12/31/2009
4.4	Right-of-Way/Land Acquisition:	NA	NA

^{*} Failure to meet project schedule may result in termination of agreement for approved projects. Modification of dates must be requested in writing by the CEO of record and approved by the commission once the Project Agreement has been executed. The project schedule should be planned around receiving a Project Agreement on or about July 1st.

5.0 PROJECT OFFICIALS:

5.1	CHIEF EXECUTIVE OFFICER TITLE STREET	David Holmes Assistant City Manager Room 104, City Hall
	CITY/ZIP PHONE FAX E-MAIL	Cincinnati, Ohio 45202 (513) 352-5368 (513) 352-2458
5.2	CHIEF FINANCIAL OFFICER TITLE STREET	Joseph Gray Finance Director Room 250, City Hall
	CITY/ZIP PHONE FAX E-MAIL	Cincinnati, Ohio 45202 (513) 352-5372 (513) 352-1520
5.3	PROJECT MANAGER TITLE STREET	Steve Hellman Superintendent of Business Services 4747 Spring Grove Avenue
	CITY/ZIP PHONE FAX E-MAIL	Cincinnati, Ohio 45232 (513) 591-7965 (513) 591-7867

Changes in Project Officials must be submitted in writing from the CEO.

6.0 ATTACHMENTS/COMPLETENESS REVIEW:

Confirm in the blocks [] below that each item listed is attached.

- [] A certified copy of the legislation by the governing body of the applicant authorizing a designated official to sign and submit this application and execute contracts. This individual should sign under 7.0, Applicant Certification, below.
- [X] A certification signed by the applicant's chief financial officer stating <u>all local share</u> funds required for the project will be available on or before the dates listed in the Project Schedule section. If the application involves a request for loan (RLP or SCIP), a certification signed by the CFO which identifies a specific revenue source for repaying the loan also must be attached. Both certifications can be accomplished in the same letter.
- [X] A registered professional engineer's detailed cost estimate and useful life statement, as required in 164-1-13, 164-1-14, and 164-1-16 of the Ohio Administrative Code. Estimates shall contain an engineer's original seal or stamp and signature.
- [NA] A cooperation agreement (if the project involves more than one subdivision or district) which identifies the fiscal and administrative responsibilities of each participant.
- [NA] Projects which include new and expansion components <u>and</u> potentially affect productive farmland should include a statement evaluating the potential impact. If there is a potential impact, the Governor=s Executive Order 98-VII and the OPWC Farmland Preservation Review Advisory apply.
- [] Capital Improvements Report: (Required by O.R.C. Chapter 164.06 on standard form)
- [X] Supporting Documentation: Materials such as additional project description, photographs, economic impact (temporary and/or full time jobs likely to be created as a result of the project), accident reports, impact on school zones, and other information to assist your district committee in ranking your project. Be sure to include supplements which may be required by your *local* District Public Works Integrating Committee.

7.0 APPLICANT CERTIFICATION:

The undersigned certifies: (1) he/she is legally authorized to request and accept financial assistance from the Ohio Public Works Commission as identified in the attached legislation; (2) to the best of his/her knowledge and belief, all representations that are part of this application are true and correct; (3) all official documents and commitments of the applicant that are part of this application have been duly authorized by the governing body of the applicant; and, (4) should the requested financial assistance be provided, that in the execution of this project, the applicant will comply with all assurances required by Ohio Law, including those involving Buy Ohio and prevailing wages.

Applicant certifies that physical construction on the project as defined in the application has NOT begun, and will not begin until a Project Agreement for this project has been executed with the Ohio Public Works Commission. Action to the contrary will result in termination of the agreement and withdrawal of Ohio Public Works Commission funding from the project.

Certifying Representative (Type or Print Name and Title)

David Holmes, Assistant City Manager

Original Signature/Date Signed

GALBRAITH RD - CROSS COUNTY HWY TO FONTAINE CT.

E. Galbraith Road **Funding Estimate**

CINCINNATI WATER WORKS Estimated Labor Summary

Page I of 1 8/28/2008 11:33:05 AM

C.W.W. Job Number D-9988-G(A)

(100% Cincinnati Water Works Cost)

ĸ	Con	tingen	cy Item
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Item No.	Quantity	Unit		Description	Unit Cost	Total Cost
1101	547	Lin. Ft.		Furnishing and Laying 6" Ductile Iron Pipe and Fittings	\$150.00	\$82,050.00
1101	450	Lin. Ft.		Furnishing and Laying 10" Ductile Iron Pipe and Fittings	\$180.00	\$81,000.00
1101	9330	Lin. Ft.		Furnishing and Laying 12" Ductile Iron Pipe and Fittings	\$125.00	\$1,166,250.00
1110	35	Cu. Yd.		Concrete, Class "C"	\$140.00	\$4,900.00
1111	9	Each		8" Valve Chamber (Precast)	\$2,000.00	\$18,000.00
1111	1	Each	*	1" Air Cock Chamber on 8" Water Main (Precast)	\$2,000.00	\$2,000.00
1111	1	Each	*	1" Air Cock Chamber on 12" Water Main (Precast)	\$2,000.00	\$2,000.00
1111	15	Each		12" Valve Chamber (Precast)	\$2,000.00	\$30,000.00
1112	22	Each		Hauling and Installing Fire Hydrant	\$900.00	\$19,800.00
1114	22	Each		Removing Fire Hydrant	\$500.00	\$11,000.00
1115	3	Each	*	Furnishing and Installing Fire Hydrant Extension, 6" Long	\$500.00	\$1,500.00
1115	15	Each		Furnishing and Installing Fire Hydrant Extension, 12" Long	\$500.00	\$7,500.00
1115	4	Each	*	Furnishing and Installing Fire Hydrant Extension, 18" Long	\$500.00	\$2,000.00
1116	22	Each		Furnishing and Installing Valve Box Complete	\$250.00	\$5,500.00
1119	200	Cu. Yd.	*	Additional Excavation	\$60.00	\$12,000.00
1120	200	Cu. Yd.	*	Exploratory Excavation	\$75.00	\$15,000.00
1121	56	Cu. Yd.		Filling Abandoned Water Works Structures	\$75.00	\$4,200.00
1122	17	Each		Removing Existing Manhole Curb and Cover	\$225.00	\$3,825.00
1122	22	Each		Removing Existing Valve Box	\$100.00	\$2,200.00
1123	200	Lin. Ft.	*	Changing 8" and Under Pipe Sewer	\$75.00	\$15,000.00
1123	200	Lin. Ft.		Changing 10" Thru 24" Pipe Sewer	\$85.00	\$17,000.00
1126	1072	Lin. Ft.		Furnishing, Installing and Connecting 3/4" Copper Service Pipe	\$56.00	\$60,032.00
1126	150	Lin. Ft.		Furnishing, Installing and Connecting 1" Copper Service Pipe	\$56.00	\$8,400.00
1126	120	Lin. Ft.		Furnishing, Installing and Connecting 1-1/2" Copper Service Pipe	\$61.00	\$7,320.00
1126	100	Lin. Ft.		Furnishing, Installing and Connecting 2" Copper Service Pipe	\$65.00	\$6,500.00
1128	37	Each		Reconnecting Existing 3/4" Service Branch	\$400.00	\$14,800.00
1128	7	Each		Reconnecting Existing 1" Service Branch	\$400.00	\$2,800.00
1128	4	Each		Reconnecting Existing 1-1/2" Service Branch	\$500.00	\$2,000.00
1128	1	Each		Reconnecting Existing 2" Service Branch	\$500.00	\$500.00
1131	70	Each		Furnishing and Installing Curb and Roadway Box	\$124.00	\$8,680.00
1138	12	Each		Removing Curb and Roadway Box	\$125.00	\$1,500.00
509	4755	Lbs.		Reinforcing Steel	\$1.00	\$4,755.00
602	1	Cu. Yd.	*	Brick Masonry	\$210.00	\$210.00
619	1	Each		Temporary Facilities	\$7,500.00	\$7,500.00
637	Millian.	MFBM	*	Sheeting and Bracing Ordered Left in Place	\$300.00	\$300.00
TE	OF O	Sea.				

Total Estimated Labor Cost

\$1,628,022.00

Project Duration = 210 Days Total Number of Plan Sheets = 25

ebecca Calder This report was printed from MCOSSINSXP-WS by MCossins



A Service of The City of Cincinnati

Greater Cincinnati Water Works The Standard for Excellence

4747 Spring Grove Avenue Cincinnati, Ohio 45232-1986 513-591-7890 Phone 513-591-7967 Fax

David E. Rager Director

Carel Vandermeyden Chief Engineer

Customer Service 513-591-7700 513-591-7730 TDD

Emergency Service 513-591-7700 513-591-7905 TDD

September 9, 2008

Subject: Galbraith Road Water Main Replacement Project
Galbraith Rd. from Cross County Hwy. to Fontaine Ct.
Certification of Useful Life

As required by Chapter 164-1-13 of the Ohio Administrative Code, I hereby certify that the design useful life of the subject water main project is at least seventy-five (75) years.



Rebecca Kester Calder, P.E.
Supervising Engineer
City of Cincinnati
Greater Cincinnati Water Works



A Service of The City of Cincinnati

Greater Cincinnati Water Works The Standard for Excellence

4747 Spring Grove Avenue Cincinnati, Ohio 45232-1986 513-591-7890 **Phone** 513-591-7967 **Fax**

David E. Rager Director

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Customer Service 513-591-7700 513-591-7730 **TDD**

Emergency Service 513-591-7700 513-591-7905 **TDD**

Mr. Lawrence Bicking, Director Ohio Public Works commission 65 East State Street, Suite 312 Columbus, Ohio 43215

RE: Repayment Method for City of Cincinnati Water Works Round 23/2008 RLP Loan Projects Ohio Public Works Commission Funding

Dear Mr. Bicking:

September 9, 2008

I am sending this letter to you for the purpose of certifying that the City of Cincinnati Water Works will have funding in the amount of \$1,628,022 in future budgets for the Galbraith Road Water Main Replacement Project-with limits from Cross County Highway to Fontaine Court.

The Cincinnati Water Works annually projects repayment of debt through the budget process. All debt is self-supporting and serviced by water user charges. Matching funds for all Greater Cincinnati Water Works projects will be from cash reserves and/or proceeds from the sale of revenue bonds.

Sincerely,

Steve Hellman

Superintendent of Business Planning and Development

Cc: C. Vandermeyden, Engineering

COUNCIL OF THE CITY OF CINCINNATI

STATE OF OHIO

OFFICE OF THE CLERK OF COUNCIL

I HEREBY CERTIFY that the foregoing transcript is correctly copied from the books, papers and journals of the City of Cincinnati, State of Ohio, kept under authority and by the direction of the Council thereof.

ORDINANCE 0375-2008 passed by the Council of the City of Cincinnati at their session on November 05, 2008 entitled:

ORDINANCE (EMERGENCY) submitted by Milton Dohoney, Jr., City Manager, on 10/29/2008, authorizing the City Manager to apply for and accept street improvement, bridge replacement, landslide correction, retaining wall improvement, rapid transit tube improvement, and street rehabilitation grants, and water supply facility improvement loans and loan assistance from the State of Ohio Public Works Commission, in an amount not to exceed \$16,491,794.00, and to execute any agreements necessary for the receipt and administration of said grants, loans, and loan assistance.

IN TESTIMONY WHEREOF I have

hereunto set my name and affixed

the seal of the Clerk of Council

Office this 6^{th} day of

November in the year Two Thousand and Eight

Robert A. Neely,

Deputy Clerk



EMERGENCY

City of Cincinnati

DWATE

An Ordinance No. 375

2008

AUTHORIZING the City Manager to apply for and accept street improvement, bridge replacement, landslide correction, retaining wall improvement, rapid transit tube improvement, and street rehabilitation grants, and water supply facility improvement loans and loan assistance from the State of Ohio Public Works Commission, in an amount not to exceed \$16,491,794.00, and to execute any agreements necessary for the receipt and administration of said grants, loans, and loan assistance.

WHEREAS, the State Capital Improvement Program, the Local Transportation Improvement Program, and the State Revolving Loan Program provide for infrastructure funding; and

WHEREAS, the District 2 Integrating Committee is accepting applications for Round 23 projects within Hamilton County, State of Ohio; and

WHEREAS, the City of Cincinnati has the required \$11,512,151 in matching City funds for Program Year 2009 for two (2) street improvement projects, namely Dana Avenue from I-71 to Victory Parkway, and Madison Road from Brotherton Road to Ridge Avenue; one (1) combination street improvement and bridge replacement project, namely Spring Grove Avenue / Clifton Avenue Bridge (previously approved for Round 23 funds); one (1) bridge replacement project, namely Center Hill Road Bridge; three (3) landslide correction projects, namely Art Museum Drive, Hillside Avenue at Henrietta Avenue, and Hillside Avenue at Tyler Avenue; one (1) retaining wall improvement project, namely Cummins Street Retaining Wall; one (1) Rapid Transit Tube Structural Repair, from Liberty Street to Brighton Corner; four (4) street rehabilitation projects, namely McMillan Street West Safety Improvement and Rehabilitation, Hyde Park Neighborhood Street Rehabilitation, Mount Auburn Neighborhood Street Rehabilitation, and Winton Road Improvement and Rehabilitation; one (1) loan assistance application for the Countywide Water Main Improvements 2009; and one (1) loan application for Galbraith Road Water Main; now, therefore,

BE IT ORDAINED by the Council of the City of Cincinnati, State of Ohio:

Section 1. That the City Manager is hereby authorized to execute and file applications, on behalf of the City of Cincinnati, with the Ohio Public Works Commission through the Hamilton County District 2 Integrating Committee, for Round 23 grants, loan assistance, and loans at an interest rate acceptable to the City of Cincinnati Director of Finance in an amount

Section 4. That this ordinance shall be an emergency measure necessary for the preservation of the public peace, health, safety and general welfare and shall, subject to the terms of Article II, Section 6 of the Charter, be effective immediately. The reason for the emergency is the immediate need to ensure acceptance of the grant applications and to ensure proper funding mechanisms are in place at the earliest possible time.

I HEREBY CERTIFY THAT ORDINANCE NO 375-200

WAS PUBLISHED IN THE CITY BULLETIN IN ACCORDANCE WITH THE CHARTER ON //-/8

Whose Attry CLERK OF COUNCIL



A Service of The City of Cincinnati

Greater Cincinnati
Water Works
The Standard for Excellence

4747 Spring Grove Avenue Cincinnati, Ohio 45232-1986 513-591-7890 Phone 513-591-7967 Fax

David E. Rager Director

Carel Vandermeyden
Chief Engineer

Customer Service 513-591-7700 513-591-7730 **TDD**

Emergency Service 513-591-7700 513-591-7905 **TDD**

September 11, 2008

Subject: Galbraith Road Water Main Replacement Project
Certification of Water Users for the OPWC Project

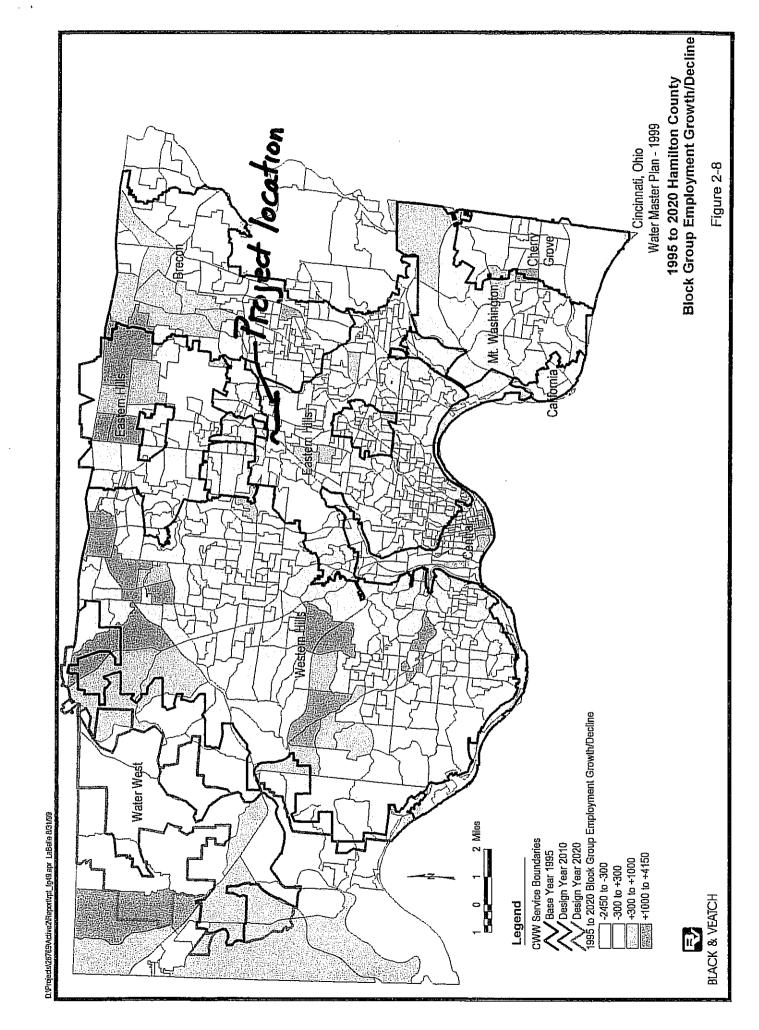
As required by the District 2 Integrating Committee, I hereby certify that the Water customer user counts herein attached for the above referenced project application are true and accurate as completed by the Greater Cincinnati Water Works Engineering Division.



(seal)

Rebecca K Calder Rebecca Kester Calder, P.E.

Supervising Engineer Greater Cincinnati Water Works Engineering Division



2.2.4 Service Level Population

Population served by service level is given in Table 2-4 and shown on Figure 2-9. The service level populations include all retail and wholesale customers in the Primary and Secondary Study Areas except the BFWC service area. Table 2-4 also includes the service level population located specifically within the Primary Study Area (Hamilton County).

13 / 1	Table 2-4							
	Population Served by Service Level							
Service			Po	pulation Se	erved ⁽¹⁾			
Level				Year				
	1960	1970	1980	1990	1995	2010	2020	
Central ⁽³⁾	123,254	69,201	53,375	50,258	48,700	47,350	46,960	
Western Hills	232,329	326,559	347,872	341,611	338,480	355,320	372,960	
Eastern Hills	397,665	410,702	350,177	336,226	329,250	376,930	410,000	
					322,890 ⁽²⁾	310,310 ⁽²⁾	309,100 ⁽²⁾	
Brecon	7,815	7,941	14,535	32,372	41,290	101,200	147,680	
	_				40,970 ⁽²⁾	43,730 ⁽²⁾	47,360 ⁽²⁾	
Mt. Washington	21,466	29,000	30,854	33,391	34,660	35,160	36,500	
Cherry Grove	5,401	10,915	17,335	20,565	22,180	22,050	23,530	
	*				21,900 ⁽²⁾	21,770 ⁽²⁾	23,250 ⁽²⁾	
California	995	825	495	658	740	760	770	
Water West	-	-	-	-	450	10,540	17,200	
						9,460 ⁽²⁾	16,120 ⁽²⁾	
Total	788,925	855,143	814,643	815,081	815,750	949,310	1,055,600	
					808,790 ⁽²⁾	823,860 ⁽²⁾	853,020 ⁽²⁾	

⁽¹⁾ Includes Total Study Area retail and wholesale customers.

⁽²⁾ Service level population residing within Primary Study Area (Hamilton County).

⁽³⁾ Boone-Florence Water Commission population not included.

ADDITIONAL SUPPORT INFORMATION

For Program Year 2009 (July 1, 2009 through June 30, 2010), applying agencies shall provide the following support information to help determine which projects will be funded. Information on this form must be accurate, and where called for, based on sound engineering principles. Documentation to substantiate the individual items, as noted, is required. The applicant should also use the rating system and its' addendum as a guide. The examples listed in this addendum are not a complete list, but only a small sampling of situations that may be relevant to a given project.

IF YOU ARE APPLYING FOR A GRANT, WILL YOU BE WILLING TO ACCEPT A LOAN IF ASKED BY THE DISTRICT? X YES NO (ANSWER REQUIRED)

Note: Answering "Yes" will not increase your score and answering "NO" will not decrease your score.

1) What is the physical condition of the existing infrastructure that is to be replaced or repaired?

Give a statement of the nature of the deficient conditions of the present facility exclusive of capacity, serviceability, health and/or safety issues. If known, give the approximate age of the infrastructure to be replaced, repaired, or expanded. Use documentation (if possible) to support your statement. Documentation may include (but is not limited to): ODOT BR86 reports, pavement management condition reports, televised underground system reports, age inventory reports, maintenance records, etc., and will only be considered if included in the original application.

Amberly Village and Deer Park are working on a separate SCIP application for the street improvement of East Galbraith Road within the same vicinity. The GCWW project is scheduled to be installed prior to this street improvement and therefore being addressed with this separate application. This replacement water main is in critical condition and must be replaced. See attached maintenance reports for further details of the structural integrity of the water main and information regarding the failed joint material. This water main is primarily being replaced due to documented maintenance problems. The average age of the water main sections being replaced within these limits is 71 years.

2) How important is the project to the safety of the Public and the citizens of the District and/or service area?

Give a statement of the projects effect on the safety of the service area. The design of the project is intended to reduce existing accident rate, promote safer conditions, and reduce the danger of risk, liability or injury. (Typical examples may include the effects of the completed project on accident rates, emergency response time, fire protection, and highway capacity.) Please be specific and provide documentation if necessary to substantiate the data. The applicant must demonstrate the type of problems that exist, the frequency and severity of the problems and the method of correction.

Water main breaks and leaks can cause icy conditions during freezing weather and slippery conditions during warm weather. Water mains are under pressure and in some areas of our system; pressures can reach as high at 250 psi. Water pressure from water main leaks and breaks can cause road pavement to heave causing uneven driving conditions and even damage to vehicles due to accidents. The replacement water main will improve the water flow in the area and help minimize the number of water main breaks and disruption to fire hydrant service. New fire hydrants will be installed on the new main. The new fire hydrants are "break away" such that if someone were to hit the hydrant it would shear off at the base and not offer the vehicle any resistance, which saves lives. This project will also provide improvement for the fire flows which protects residential, commercial and industrial

Priority 1

3) How important is the project to the health of the Public and the citizens of the District and/or service area?

Give a statement of the projects effect on the health of the service area. The design of the project will improve the overall condition of the facility so as to reduce or eliminate potential for disease, or correct concerns regarding the environmental health of the area. (Typical examples may include the effects of the completed project by improving or adding storm drainage or sanitary facilities, etc.). Please be specific and provide documentation if necessary to substantiate the data. The applying agency must demonstrate the type of problems that exist, the frequency and severity of the problems and the method of correction.

The project is important to the health of the Water Works (GCWW) customers. Leaks and breaks cause standing water. The public has become less tolerant to standing water since it provides additional mosquito breeding areas and the potential for West Nile Virus. Water quality is also improved when older lead jointed, unlined cast iron mains are replaced with new cement lined ductile iron pipe assuring that high quality water will continue to be provided. Unlined cast iron water mains corrode internally and "tuberculate". Bacteria/biofilm builds up on the tuberculation. All water mains get a biofilm or bacteria buildup internally. However, tuberculation only occurs within the unlined cast iron water mains. With unlined cast iron pipe the biofilm secretes a chemical which causes tuberculation (rust nodules) to form. Tuberculation reacts with the chlorine in the water so there is less chlorine to kill the bacteria. This depletion of chlorine can cause an increase in bacteria growth. Some of these bacteria can impact human health. The new cement lined water mains installed with our projects decrease the area where the bacteria can grow and increase the amount of chlorine in the public water system thereby improving the quality of our water system.

4) Does the project help meet the infrastructure repair and replacement needs of the applying jurisdiction?

The applying agency must submit a listing in priority order of the projects for which it is applying. Points will be awarded on the basis of most to least importance.

Countywide Water Main Improvements - Phase 2009 (Loan Assistance)

Priority 2	Galbraith Road-Reading to Fontaine (Loan)
Priority 3	
Priority 4	
Priority 5	
	extent will the user fee funded agency be participating in the funding of the project? s for water or sewer, frontage assessments, etc.).
The Water	Works has provided all of the funding for this project through bond sales or
cash reserv	es.

6) Economic Growth - How will the completed project enhance economic growth

Give a statement of the projects effect on economic growth. (be specific).

This project will have a positive effect on economic growth of the GCWW service area by providing additional, plentiful, high quality water. The newer water main will be more reliable, causing fewer street repairs, maintaining higher quality of roadways with fewer delays due to water main issues. As we continue to upgrade and strengthen our water system, GCWW improves the ability to provide additional capacity to development throughout the City and the County. Our longtime goal has been to create and maintain a strong hydraulic grid such that all property has good pressures and flow to satisfy all reasonable fire and domestic water service demands.

7) Matching Funds - LOCAL

The information regarding local matching funds is to be filed by the applying agency in Section 1.2 (b) of the Ohio Public Works Association's "Application For Financial Assistance" form.

8) Matching Funds - OTHER

The information regarding local matching funds is to be filed by the applying agency in Section 1.2 (c) of the Ohio Public Works Association's "Application For Financial Assistance" form. If MRF funds are being used for matching funds, the MRF application must have been filed by Friday, August 29, 2008 for this project with the Hamilton County Engineer's Office. List below all "other" funding the source(s).

The project will be funded by bond proceeds or GCWW cash reserves.

9) Will the project alleviate serious capacity problems or respond to the future level of service needs of the district?

Describe how the proposed project will alleviate serious capacity problems (be specific).

The project will meet future capacity demands. Because of the size of our water distribution system, this new water main is designed for growth over a 20 year period. All of the 8" water main will be replaced with 12" water thereby increasing water system capacity. The water capacity for the main in Galbraith will increase from one million gallons per day to approximately two million gallons per day. This water main services several large water branches in the City of Reading and this increase in size helps to improve the water source. This proposed 12" water main also will serve as an east-west feed for the distribution hydraulic system. One of GCWW Planning goals is to strengthen the east-west feeds. This project is one of several projects on Galbraith Road either recently completed or coming up in the Capital Improvement program to increase the water main size to 12" water main.

Level of Service (LOS) calculations shall be for the improvements being made in the application. If this project is a phase of a larger project then any preceding phases shall be considered existing conditions for LOS calculations. Any future project phases shall not be considered as part of this applications LOS calculations.

For roadway betterment projects, provide the existing and proposed Level of Service (LOS) of the facility using the methodology outlined within AASHTO'S "Geometric Design of Highways and Streets" and the 1985 Highway Capacity Manual.

<u>No Build</u>	Proposed (
Current Year LOS		ear LOS			
Design Year LOS	Design Ye	ar LOS			
If the proposed design year LOS is not "C" or better, explain when Not applicable.			eved.		
	\ <u>-</u>				
				<u></u> .	
10) If SCIP/LTIP funds were granted, when would the con-	struction co	ntract be awa	ırded?		
Not applicable					
If SCIP/LTIP funds are awarded, how soon after receiving the I of the year following the deadline for applications) would the p status reports of previous projects to help judge the accuracy of	roject be un	der contract?	The Sup	port Staff	et for July 1 will review
Number of months7					
a.) Are preliminary plans or engineering completed?	Yes	No	X	N/A _	
b.) Are detailed construction plans completed?	Yes	No	X	N/A _	
c.) Are all utility coordination's completed?	Yes	No	X	N/A _	
d.) Are all right-of-way and easements acquired (if applicable)?	Yes	No		N/A _	X
If no, how many parcels needed for project?	_ Of these, l	now many are:	Takes _		
			Tempora	ary	
			Perman	ent	
For any parcels not yet acquired, explain the status of t	he ROW acc	quisition proce	ss for thi	is project.	
					
	<u>ua</u>				<u> </u>
e.) Give an estimate of time needed to complete any item above	not yet com	pleted.			_ Months.
44) To					
11) Does the infrastructure have regional impact?					

Give a brief statement concerning the regional significance of the infrastructure to be replaced, repaired, or expanded. This project represents a vital water main project located in Hamilton County. The project consists a "dual service" water main which has customer water service branches but the main has the capacity to move large volumes of water quickly to the higher water demand areas. Sixty five percent of the existing 8" water main is unlined cast iron pipe with lead joints.

Eliminating the unl	lined cas	st iron pipe	from th	e water sy	stem :	also he	lps to minimize the
occasions of rusty w	ater and	i "taste and o	odor" iss	ues. These	situat	ions ar	e decreased because
the tuberculated pi	pes are	replaced wit	th cemer	t lined pi	pes. [<u>Che int</u>	ernal cement lining
prevents internal co	rrosion	to the pipe.	The ou	tside of the	e pipe	is wra	pped in a polywrap
(plastic sheeting) wh	ich prev	<u>vents externa</u>	l corrosi	on to the p	oipe. W	ith the	structural integrity
of the new pipe prot	ected bo	th internally	and ext	ernally, the	e pipe i	is less li	ikely to corrode and
have maintenance is	sues to	interrupt wa	ter servi	ce. We co	<u>ntinue</u>	to sup	ply a more plentiful
supply of high qua							
service interruption and helps to maintain the roadways because there will be decrease							
maintenance occurre							
							_
12) What is the overall of	economic l	ıealth of the jur	isdiction?				
The District 2 Integrating jurisdiction may periodica							he economic health of a
13) Has any formal action by a federal, state, or local government agency resulted in a partial or complete ban of the usage or expansion of the usage for the involved infrastructure?							
Describe what formal acti infrastructure? Typical ex building permits, etc. The Submission of a copy of the Not applicable.	amples inc ban must	clude weight lim have been caus	its, truck re sed by a st	strictions, and ructural or op	l morato	riums or	limitations on issuance of
Will the ban be removed a	fter the pro	oject is complete	d?	Yes	N	o	N/A
14) What is the total nu	mber of e	xisting daily us	ers that w	ill benefit as	a result	of the p	roposed project?
For roads and bridges, madocumentation substantiat documented traffic counts facilities, multiply the nucertified by a professional	ing the co prior to to mber of h	ount. Where the the restriction. ouseholds in the	e facility c For storm e service a	urrently has a sewers, sanit	any resti ary sew	rictions o ers, wate	or is partially closed, use r lines, and other related
Traffic: ADT		X 1.20 =		Users			
		X 4.00 = <u>over</u>					
15) Has the jurisdiction dedicated tax for the				plate fee,	an infr	astructu	re levy, a user fee, or
The applying jurisdiction sh applied for. (Check all that	all list wha apply)	t type of fees, lev	ries or taxes	they have ded	licated to	ward the	type of infrastructure being
Optional \$5.00 License Tax	х						
Infrastructure Levy							
Facility Users Fee	<u>X</u>	Specify type	Service c	harge for wat	er suppl	γ	
Dedicated Tax		Specify type					

Other Fee, Levy or Tax ______ Specify type __

SCIP/LTIP PROGRAM ROUND 23 - PROGRAM YEAR 2009 PROJECT SELECTION CRITERIA JULY 1, 2009 TO JUNE 30, 2010

NAME OF APPLICANT	r: <u> </u>	OFC	LNCIK	NATI	GC	. WW)	
NAME OF PROJECT: _							Al s
RATING TEAM:	od*-						

General Statement for Rating Criteria

Points awarded for all items will be based on engineering experience, field verification, application information and other information supplied by the applying agency, which is deemed to be relevant by the Support Staff. The examples listed in this addendum are not a complete list, but only a small sampling of situations that may be relevant to a given project.

Appeal Score

CIRCLE THE APPROPRIATE RATING

What is the physical condition of the existing infrastructure that is to be replaced or repaired?

25 - Failed 23- Critical 20 - Very Poor

3)- Critical

17 - Poor

1)

15 - Moderately Poor

10 - Moderately Fair

5 - Fair Condition

0 - Good or Better

Criterion 1 - Condition

Condition of the particular infrastructure to be repaired, reconstructed or replaced shall be a measure of the degree of reduction in condition from its original state. Historic pavement management data based on ASTM D6433-99 rating system may be submitted as documentation. Capacity, serviceability, safety and health shall not be considered in this criterion. Any documentation the Applicant wishes to be considered must be included in the application package.

Definitions:

Failed Condition - requires complete reconstruction where no part of the existing facility is salvageable. (E.g. Roads: complete reconstruction of roadway, curbs and base; Bridges: complete removal and replacement of bridge; Underground: removal and replacement of an underground drainage or water system.

Critical Condition - requires partial reconstruction to maintain integrity. (E.g. Roads: reconstruction of roadway/curbs can be saved; Bridges: removal and replacement of bridge with abutment modification; Underground: removal and replacement of part of an underground drainage or water system.

<u>Very Poor Condition</u> - requires extensive rehabilitation to maintain integrity. (E.g. Roads: extensive full depth, partial depth and curb repair of a roadway with a structural overlay; Bridges: superstructure replacement; Underground: repair of joints and/or replacement of pipe sections.

Poor Condition - requires standard rehabilitation to maintain integrity. (E.g. Roads: moderate full depth, partial depth and curb repair to a roadway with no structural overlay needed or structural overlay with minor repairs to a roadway needed; Bridges: extensive patching of substructure and replacement of deck; Underground: insituform or other in ground repairs.

Moderately Poor Condition - requires minor rehabilitation to maintain integrity. (E.g. Roads: minor full depth, partial depth or curb repairs to a roadway with either a thin overlay or no overlay needed; Bridges: major structural patching and/or major deck repair.

Moderately Fair Condition - requires extensive maintenance to maintain integrity. (E.g. Roads: thin or no overlay with extensive crack sealing, minor partial depth and/or slurry or rejuvenation; Bridges: minor structural patching, deck repair, erosion control.)

Fair Condition - requires routine maintenance to maintain integrity. (E.g. Roads: slurry seal, rejuvenation or routine crack sealing to the roadway; Bridges: minor structural patching.)

Good or Better Condition - little to no maintenance required to maintain integrity.

<u>Note:</u> If the infrastructure is in "good" or better condition, it will <u>NOT</u> be considered for SCIP/LTIP funding unless it is an expansion project that will improve serviceability.

25 - Highly significant importance 20 - Considerably significant importance 15 - Moderate importance 10 - Minimal importance 5 Poorly documented importance 0 - No measurable impact	Appeal Score
Criterion 2 – Safety The applying agency shall include in its application the type of deficiency that currently exists and how improve the situation. For example, have there been vehicular accidents attributable to the problems injuries or fatalities? In the case of water systems, are existing hydrants non-functional? In the case of capacity inadequate to provide volumes or pressure for adequate fire protection? In all cases, specific of Mentioned problems, which are poorly documented, generally will not receive more than 5 points. Nate: Each project is looked at on an individual basis to determine if any aspects of this category apply. NOT intended to be exclusive.	cited? Have they involved of water lines, is the present locumentation is required.
How important is the project to the <u>health</u> of the Public and the citizens of the District and/or service	e area?
25 - Highly significant importance 20 - Considerably significant importance 15 - Moderate importance 10 - Minimal importance 5 - Poorly documented importance O No measurable impact	Appeal Score
Criterion 3 – Health The applying agency shall include in its application the type, frequency, and severity of the health problem reduced by the intended project. For example, can the problem be eliminated only by the project, or we satisfactory? If basement flooding has occurred, was it storm water or sanitary flow? What complaints case of underground improvements, how will they improve health if they are storm sewers? How would improve health or reduce health risk? In all cases, quantified documentation is required. Mentioned documented, generally will not receive more than 5 points.	ould routine maintenance be if any are recorded? In the d improved sanitary sewers
<i>Note</i> : Each project is looked at on an individual basis to determine if any aspects of this category apply. are NOT intended to be exclusive.	Examples given above
Does the project help meet the infrastructure repair and replacement needs of the applying agency? Note: Applying agency's priority listing (part of the Additional Support Information) must be filed with applicat	tion(s).
25 - First priority project 20 - Second priority project 15 - Third priority project 10 - Fourth priority project 5 - Fifth priority project or lower Criterion 4 – Jurisdiction's Priority Listing	Appeal Score

How important is the project to the safety of the Public and the citizens of the District and/or service area?

2)

3)

4)

The applying agency **must** submit a listing in priority order of the projects for which it is applying. Points will be awarded on the basis of most to least importance. The form is included in the Additional Support Information.

To what extent will a user fee funded agency be participating in the fur	iding of the project?
10 – Less than 10%	5 1 J
9 – 10% to 19.99%	
8 – 20% to 29.99%	Appeal Score
7 – 30% to 39.99%	••
6 – 40% to 49.99%	
5 – 50% to 59.99%	····
4 – 60% to 69.99%	
3 – 70% to 79.99%	
2 – 80% to 89.99%	
1-90% to 95%	
O Above 95%	
Criterion 5 – User Fee-funded Agency Participation	
To what extent will a user fee funded agency be participating in the funding of the p	roject? (Example: rates for water or sewer,
frontage assessments, etc.). The applying agency must submit documentation.	
Economic Growth – How the completed project will enhance economic growth	(See definitions).
10 – The project will directly secure new employment	Appeal Score
5 – The project will permit more development	Tippent Section
(0) The project will not impact development	
Criterion 6 – Economic Growth	
Will the completed project enhance economic growth and/or development in the ser	णास्कारहस्य ?
Definitions:	
Secure new employment: The project as designed will secure development/employees to the jurisdiction. The applying agency must submit details.	•
Permit more development: The project as designed will permit additional business	ss development/employment. The applying agency
must supply details.	
The project will not impact development: The project will have no impact on bus	iness development.
Note: Each project is looked at on an individual basis to determine if any asp	ects of this category apply.
Matching Funds - LOCAL	
10- This project is a loan or credit enhancement	
10 – 50% or higher	
8 – 40% to 49.99% List total percentage of "Local" f	unds %
-	unds%
8 – 40% to 49.99% List total percentage of "Local" f	unds%
8 – 40% to 49.99% List total percentage of "Local" f 6 – 30% to 39.99%	unds%
8 – 40% to 49.99% List total percentage of "Local" f 6 – 30% to 39.99% 4 – 20% to 29.99%	unds%

5)

6)

7)

The percentage of matching funds which come directly from the budget of the applying agency. Ten points shall be awarded if a loan request is at least 50% of the total project cost. (If the applying agency is not a user fee funded agency, any funds to be provided by a user fee generating agency will be considered "Matching Funds – Other").

Matching Funds – <u>OTHER</u>	List total percentage of "Other" funds%
10 – 50% or higher	List below each funding source and percentage
8 – 40% to 49.99%	%
6 – 30% to 39.99%	
4 – 20% to 29.99%	%
2 – 10% to 19.99%	%
1 – 1% to 9.99%	<u> </u>
0– Less than 1%	

Criterion 8 - Matching Funds - Other

The percentage of matching funds that come from funding sources other than those mentioned in Criterion 7. A letter from the outside funding agency stating their financial participation in the project and the amount of funding is required to receive points. For MRF, a copy of the current application form filed with the Hamilton County Engineer's Office meets the requirement.

9) Will the project alleviate serious capacity problems or hazards or respond to the future level of service needs of the district?

10 - Project design is for future demand.		Appeal Scor
8-Project design is for partial future demand.	ب	
6 - Project design is for current demand.		
4 - Project design is for minimal increase in capacity.		

- 0 Project design is for no increase in capacity.

Criterion 9 - Alleviate Capacity Problems

The applying agency shall provide a narrative, along with pertinent support documentation, which describe the existing deficiencies and showing how congestion will be reduced or eliminated and how service will be improved to meet the needs of any expected growth or development. A formal capacity analysis must accompany the application to receive more than 4 points. Projected traffic or demand should be calculated as follows:

Formula:

Existing volume x design year factor = projected volume

<u>Design Year</u>	<u>Design year</u>	tactor	
	<u>Urban</u>	Suburban	<u>Rural</u>
20	1.40	1.70	1.60
10	1.20	1.35	1.30

Definitions:

<u>Future demand</u> – Project will eliminate existing congestion or deficiencies and will provide sufficient capacity or service for twenty-year projected demand or fully developed area conditions. Justification must be supplied if the area is already largely developed or undevelopable and thus the projection factors used deviate from the above table.

<u>Partial future demand</u> – Project will eliminate existing congestion or deficiencies and will provide sufficient capacity or service for ten-year projected demand or partially developed area conditions. Justification must be supplied if the area is already largely developed or undevelopable and thus the projection factors used deviate from the above table.

<u>Current demand</u> – Project will eliminate existing congestion or deficiencies and will provide sufficient capacity or service only for existing demand and conditions.

<u>Minimal increase</u> – Project will reduce but not eliminate existing congestion or deficiencies and will provide a minimal but less than sufficient increase in existing capacity or service for existing demand and conditions.

No increase – Project will have no effect on existing congestion or deficiencies and provide no increase in capacity or service for existing demand and conditions.

- 10) Readiness to Proceed If SCIP/LTIP funds are granted, when would the construction contract be awarded?
 - 5. Will be under contract by December 31, 2009 and no delinquent projects in Rounds 20 & 21
 - $\widetilde{ extbf{3}}$ Will be under contract by March 31, 2010 and/or one delinquent project in Rounds 20 & 21
 - 0 Will not be under contract by March 31, 2010 and/or more than one delinquent project in Rounds 20 & 21

Criterion 10 - Readiness to Proceed

The Support Staff will assign points based on engineering experience and status of design plans. A project is considered delinquent when it has not received a notice to proceed within the time stated on the original application and no time extension has been granted by the OPWC. An applying agency receiving approval for a project and subsequently canceling the same after the bid date on the application will receive zero (0) points under this round and the following round.

Appeal Score

- 11) Does the infrastructure have regional impact? Consider origination and destination of traffic, functional classifications, size of service area, and number of jurisdictions served, etc.
 - 1<u>0</u> Major Impact

28 – Significant Impact 6 – Moderate Impact

- → 4 Minor Impact
 - 2 Minimal or No Impact

Criterion 11 - Regional Impact

The regional significance of the infrastructure that is being repaired or replaced.

Definitions:

Major Impact - Roads: Major Arterial: A direct connector to an Interstate Highway; Arterials are intended to provide a greater degree of mobility rather than land access. Arterials generally convey large traffic volumes for distances greater than one mile. A major arterial is a highway that is of regional importance and is intended to serve beyond the county. It may connect urban centers with one another and/or with outlying communities and employment or shopping centers. A major arterial is intended primarily to serve through traffic.

Significant Impact - Roads: Minor Arterial: A roadway, also serving through traffic, that is similar in function to a major arterial, but operates with lower traffic volumes, serves trips of shorter distances (but still greater than one mile), and may provide a higher degree of property access than do major arterials.

Moderate Impact - Roads: Major Collector: A roadway that provides for traffic movement between local roads/streets and arterials or community-wide activity centers and carries moderate traffic volumes over moderate distances (generally less than one mile). Major collectors may also provide direct access to abutting properties, such as regional shopping centers, large industrial parks, major subdivisions and community-wide recreational facilities, but typically not individual residences. Most major collectors are also county roads and are therefore through streets.

Minor Impact - Roads: Minor Collector: A roadway similar in functions to a major collector but which carries lower traffic volumes over shorter distances and has a higher degree of property access. Minor collectors may serve as main circulation streets within large, residential neighborhoods. Most minor collectors are also township roads and streets and may, or may not, be through streets.

Minimal or No Impact - Roads: Local: A roadway that is primarily intended to provide access to abutting properties. It tends to accommodate lower traffic volumes, serves short trips (generally within neighborhoods), and provides connections preferably only to collector streets rather than arterials.

12)	What is the overall economic health of the jurisdiction?	
	10 Points 8 Points 6 Points 4 Points 2 Points	
	Criterion 12 – Economic Health The District 2 Integrating Committee predetermines the applying agency's economic health. 'may periodically be adjusted when census and other budgetary data are updated.	The economic health of a jurisdiction
13)	Has any formal action by a federal, state, or local government agency resulted in a parti expansion of the usage for the involved infrastructure?	ial or complete ban of the usage or
	10 - Complete ban, facility closed 8 - 80% reduction in legal load or 4-wheeled vehicles only 7 - Moratorium on future development, not functioning for current demand 6 - 60% reduction in legal load 5 - Moratorium on future development, functioning for current demand 4 - 40% reduction in legal load 2 - 20% reduction in legal load 0 - Less than 20% reduction in legal load Criterion 13 - Ban The applying agency shall provide documentation to show that a facility ban or moratorium moratorium must have been caused by a structural or operational problem. Points will only will cause the ban to be lifted.	Appeal Score has been formally placed. The ban or be awarded if the end result of the project
14)	What is the total number of existing daily users that will benefit as a result of the propos	sed project?
	10 - 30,000 or more 8 - 21,000 to 29,999 6 - 12,000 to 20,999 4 - 3,000 to 11,999 2 - 2,999 and under Criterion 14 - Users The applying agency shall provide documentation. A registered professional engineer or the appropriate documentation. Documentation may include current traffic counts, households s of persons. Public transit users are permitted to be counted for the roads and bridges, but o provided.	served, when converted to a measuremen
15)	Has the applying agency enacted the optional \$5 license plate fee, an infrastructure levy, pertinent infrastructure? (Provide documentation of which fees have been enacted.)	, a user fee, or dedicated tax for the
	5- Two or more of the above 3 - One of the above 0 - None of the above	Appeal Score
The ap	ion 15 – Fees, Levies, Etc. oplying agency shall document (in the "Additional Support Information" form) which type of the type of infrastructure being applied for.	fees, levies or taxes they have dedicated

	Underground Report		Report N
	7 + 7000	RLY	VILL AGE Date 1-16-94
Location: 2, 5, DE GALL	BRAIL TILE STOFF O	L, OF RIDER Permit No.	Crew Ticket No.
Pipe Size: 6 0.D.:	Depth: 62" Cement	Cement Lined - Y/N(ப) Polywrapped - Y/的	<u>.</u>
Main to Box, Nearest Branch:	House No. & Street:		Main to C/L: // , 6 W
I. Existing Conditions/Materials: (Circle no more than two in each category)			Code:
Pavement Types Excavaled Material 1 Concrete 1 Bank Buc/Gravet	e Material		Branch Material
2 Block Paved 2 Cinders	2 Steel 2 Mechanical Joint	01 Badly Pitted 1	Copper
(a)	le fron 3	03 Amooth 3	Galvanized Steel/Black from
5 Low Type (grayel) 5 Fill	Concrete 4	04 Not Visible	Brass
	6 Copper (Transite) 5 Flange	n Un	Plastic
Sidewalk 7	Plastic	Heavy Tuberculation	Cast Iron
8 Driveway 8 Other-See Below 9 Other-See Below	8 Not Visible	1	B.Does Not Apply
Cut Size: $\cancel{>_{2}} \times \cancel{1}$		rculation (9 Other-See Below
		15 Not Visible 16 Other-See Below	•
II. Utilities In Excavation: (Circle) (0 None 1 Sewer	2 Gas 3 Electric 4 Telephone 5 T.V. Cable 6	Car Rails 7 Other	
Measurements: (Sketch on back — Y/N)			
III. Walnienance: (Circle one) Break 2 Leak - Jo	2 Leak - Joint, Valve, Fire Hydrant, Branch 3 New Installation* 4 Abandonment* (*Drawing on back — (Circle One Leak Type and One Repair Type From The Following Categories)	Abandonment* (*Drawing on back — Y/N) Type From The Following Categories)	
Main Break/Joint Leak Type 11 Circular Crack	Valve Leak Type 21 Stuffing Box	Fire Hydrant Leak Type 31 Inside Lead Leak	Branch Leak Type
Longitudinal Crack	, ш	32 Outside Lead Leak	42 Stop Cock
14 Corrosion Hole 15 Rusted Bolts 16 Bad Gasket/jt. material	29 Other-See Below	39 Other-See Below	43 Inside Pipe Leak 44 Outside Pipe Leak 45 Service Saddle 49 Other-Sea Relow
Main/Joint Repair Type 01 Caulk Joint 02 Caulk & Clarm. Icint	Valve Repair Type 01 Replace Existing Valve	Fire Hydrant Repair Type 01 Renew Existing Lead	Branch Repair Type 01 Repair
		03 Replace Existing F.H. Valve & Lead 90 Install New F.H., Lead and Valve 98 Abandon F.H., Lead and Valve	02 Heplace 03 Disconnect 90 New Branch Installation
06 Replace Bolts 07 Replace fitting/cplg. 08 Tighten Coupling	06 Replace Seal Plate *98 Abandon Valve 07 Replace Stem 99 Other-See Below 08 Replace Gears		99 Other-See Below
Structure:	Structure:	Structure:	Structure:
Code:	Code:	Code:	Code:
Remarks/Other: Found 6"	1LV BONNET OFF VAL	VE REPLACED 6	" MrV"
USED 1-6" CJ. VALVE	3.6" DIT 2-6"	PIPE COUPLINGS	
4/90 BIFYB		" ABO / ABO	7

Use other side for sketch if necessary. Check here

UNDERGROUND REPORT	LEAK
HOUSE NO. & STREET & GAUBRAINS & Z-71 DATE 1/4/64	Pip
PERMIT NO. LOCATION / TR / WEST of /ST & HED	NEW WORK
EBST 9 I-71 OVER ASS.	Install. Conn. Other
MAIN TO BOX NEAREST BRANCH (House No.) MAIN TO C/L &O' (Direc	(Direction) S PIPE SIZE
PAVING GRASS DEPTH 4'2"	0.D.
TYPE OF PIPE & JOINT CAST DOWN PING Join NOT EXPOSED	7
SOIL CONDITION (Circle One) - Bank Run - Cinders - Rock - Clay - Fill - Dirt -	Other
PIPE CONDITION (Circle One) - Outside: - Badly Pitted - Pitted - Smooth-	Other
Inside: Tuberculation - Heavy - Medium - Light -	None None
LOCATION OF OTHER UTILITIES IN EXCAVATION NONE	
REASON FOR EXCAVATION - Branch Installation (Size) Connection (Size	ze & Type)
addle - Fe	9
eak (Circle One) Cir.Crack Long crack - Bell	Crack - Spigot Crack -
Was there construction in area? Yes (No) By whom? Exter	Extent of damage
Remarks (Include type of repair; descr. of break) 8" C/R CRACK /NS>	MSTALLED A
FOI	Foreman: X/ 77

Use other side for sketch if necessary. Check here

CCATION SHIM IS HOUSE NO 2465 MAIN TO C/L 9' DIRECTION S

$\frac{3}{8}$
MAIN BREAK: (Y)N PIPE MATERIAL 1. JOINT TYPE MAIN LEAK TYPE 1. PIPE: SIZE 2" O.D. DEPTH 46" PIPE COND.; OUTSIDE & INSIDE CEMENT LINED: Y/N POLY WRAPPED; Y/N VALVE LEAK
SERVICE BRANCH BREAK: Y/N BRANCH MATERIAL BRANCH LEAK TYPE BRANCH: SIZE DEPTHBRANCH: SIZE
REPAIR: MANHOURS COST 100 RESTORATION: MANHOURS COST
INSTALLATION TYPE: FIRE HYDRANT: Y/N SERVICE BRANCH: Y/N
LOCATION OF OTHER UTILITIES IN EXCAVATION LIZE & FOX 2464 8 (31) E OF 1/NE
TRUCTION IN AREA; Y/N B.
(P) Pe pa) y where pred Ferrile 2 / Capper / Copper to Capper

YEAR PIPE INSTALLED SOIL: TYPE PH CORROSION FACE
WENT No N COORD, E COORD

UNDERGROUND REPORT	10
	Joint Pipe Branch
PERMIT NO. LOCATION 3/1.6 Wod 2ed F.H. Wod	NEW WORK
CREW NO. Lowis Miney Crest 2,3 Not 8 curp	Install. Conn. Other
12.7	(Direction) S PIPE SIZE &
PAVING EFFET ERON LEADER PSOMM DEPTH 4.9	0.D.
TYPE OF PIPE & JOINT CAST LEON LENDITE LOOK E UP	14.71
1 - Dirt -	Other_
PIPE CONDITION (Circle One) - Outside: - Badly Pitted - Pitted - Smooth -	Other
Inside: Tuberculation - Heavy - Medium - Light	- None
Cement Lined: - Yes No Irregular Wall	11 Thickness: Yes No
LOCATION OF OTHER UTILITIES IN EXCAVATION Nove in Cat	
REASON FOR EXCAVATION - Branch Installation (Size) Connection (Size & Type)	ze & Type)
Date Time Service Branch Leak (Cir	ule - Curb Cock -Other
On Service Branch Material (Circle One) - Copper - Lead - Brass On Main Break (Circle One) Cir.Crack - Long crack - Bell Crack Other	Brass - Other Crack - Spigot Crack -
Was there construction in area? Yes (No) By whom? Extent	it of damage Now
eason for exc.	
Remarks (Include type of repair; descr. of break) Town Lengte UT L.	Al Kemoko
white Dissing on Mein hot The cop live To	328 Amot.
	Foreman:
Check here	121,000
1/2 splice 2 months	

		emp	Remarks/Other: 1-8" Lesk Clie
Code:	Code:	Code:	
Structure:	Structure:	Structure:	
49 Other-See Below Branch Repair Type 01 Repair 02 Replace 03 Disconnect '90 New Branch Installation '98 Abandon Branch 99 Other-See Below	Fire Hydrant Repair Type 01 Renew Existing Lead 02 Replace Existing F.H. Valve 03 Replace Existing F.H. Valve & Lead 90 Install New F.H., Lead and Valve 98 Abandon F.H., Lead and Valve 99 Other-See Below	Valve Repair Type 01 Replace Existing Valve 02 Replace Cap 03 Replace Bonnet/Stem 04 Bolt Replacement '90 Install, "Cut In" 05 Repack Stuffing Box New Valve 06 Replace Seal Plate '98 Abandon Valve 07 Replace Stem 99 Other-See Below 08 Replace Gears	Main/Joint Repair Type 01 Caulk Joint 02 Caulk & Clamp Joint 02 Caulk & Clamp Joint 03 Peak Clamp 04 Pipe & Coupling 05 Repour Lead 06 Replace Bolts 07 Replace fitting/cplg. 08 Tighten Coupling Structure:
Branch Leak Type 41 Ferrule 42 Stop Cock 43 Inside Pipe Leak 44 Outside Pipe Leak 45 Service Saddle	Fire Hydrant Leak Type 31 Inside Lead Leak 32 Outside Lead Leak 33 Hydrant Valve 39 Other-See Below	ve Leak T Stuffing B Sonnet Bo Bonective Defective Other-See	12 Circular Crack 12 Longitudinal Crack 13 Bell Crack 14 Corrosion Hole 15 Rusted Bolts 16 Bad Gasket/Jt. material
	Abandonment* (*Drawing on back — Y/N) Type From The Following Categories)	2 Leak - Joint, Valve, Fire Hydrant, Branch 3 New Installation* 4 Abandonment* (*Drawing on back (Circle One Leak Type and One Repair Type From The Following Categories)	e: (Circle one) (Break)
1sin 2'SetWM. IDeep	7 Oth	2 Gas 3 Electric 4 Telephone 5 T.V. Cable 6 Car Rails	Oircle) 0 None 1 Sewer
Code: Branch Material 1 Copper 2 Lead 3 Galvanized Steel/Black Iron 4 Brass 5 Plastic 6 Cast Iron 7 Ductile Iron 8 Does Not Apply 9 Other-See Below	Pipe Condition-Outside O1 Badly Pitted O2 Pitted O2 Pitted O3 Smooth O4 Not Visible O5 Other-See Below Pipe Condition-inside 11 Heavy Tuberculation 12 Medium Tuberculation 13 Light Tuberculation 14 No Tuberculation 15 Web Visible 16 Other-See Below 16 Other-See Below	Pipe Material 2 Steel 3 Ductile Iron 4 Concrete 5 Asbestos Cement (Transite) 6 Copper 7 Plastic 8 Not Visible 9 Other-See Below	Lexisting Conditions/Materials: (Circle no more than two in each category) Pavement Types Excavated Material Pipe Material Concrete Code: Code: Code:
Report No	Ground Report Neighborhood: Amber by Vill Permit No. Cement Lined - Y/N(O) Polywrapped - Y(N) Pet:	Underground Report Sol braith Neighborhoo Neighborhoo Depth: 5.0 Cement Lined - Y/N/O House No. & Street:	House No. & Street: 2344×10^{-1} Location: 2344×10^{-1} Location: $24.8' \times 10^{-1}$ O.D.: Main to Box, Nearest Branch: 2344×10^{-1} Main to Box, N

4/90 **國**EYR

Crew Leader/Field Supervisor

<u>-</u>

FIELD SUPRV. CANDELLED SOIL: TYPE POLITICAL SUBD. S.A. TEMB SEGMENT No. SOIL: TYPE TEMB SEGMENT No. SOIL: TYPE TEMB SEGMENT No. SOIL: TYPE SEGMENT NO.	F BOX IS CHECKED SEE SKETC ******* YEAR PIPE INSTALLED POLITICAL SUBD. PIPE SEGMENT No. WATER: TEMP
BRANCH SIZE CONNECTION (SIZE & TYPE) LOCATION OF OTHER UTILITIES IN EXCAVATION NOTE CONSTRUCTION IN AREA: Y(N) REMARKS Circular Crack on 8 whom? Note Clamb Cal 1-5/x2, Shall on 8 whom? Note	BRANCH SIZE LOCATION OF OTH CONSTRUCTION IN REMARKS Ciccu
R: MANHOURS COST RESTORATION: MANHOURS COST NTION TYPE: FIRE HYDRANT: Y/D SERVICE BRANCH: Y/D	REPAIR: MANHOURS
BRANCH BREAL	SERVICE BRANI BRANCH: SIZI
BREAK: Y/N) PIPE MATERIAL / JOINT TYPE NA MAIN LEAK TYPE // CRACK SIZE 8 O.D. DEPTH 60 PIPE COND.: OUTSIDE 0-2 INSIDE /// ENT LINED: Y/N NA POLY WRAPPED: Y/N) VALVE LEAK NOW.	MAIN BREAK: Y PIPE: SIZE & CEMENT LINED
**************************************	REPAIR TYPE:
HOUSE NO. 2401 DIR. STREET LOST (Sc/bralk VINDERGROUND REPORT) LOCATION LOST GANGEST BR. NA HOUSE NO. — MAIN TO C/L 2.5° DIRECTION South	HOUSE No. 2401 LOCATION E 251 MAIN TO BOX NE
ACINNATI WATHR WORKS DEDAID ITMEDIATOTINED DITAIN DITAIN	

24/6	シーカファデナト ので	Underground Report	hely which Report No.
Location: 107/10 at 1 as	MLV S, of Nanysas	Permit No.	Crew Ticket No.
Pipe Size: 31/ O.D.:	Depth: Cemer	Cement Lined - Y/N(U)Polywrapped - Y/N)J	
-	House No. & Street:		Main to C/L: 7 6 " W
I. Existing Conditions/Materials: (Circle no more	Ihan two in each category)		Aaterials: (Circle no more than two in each category)
Pavement Types Excavated Material 1 Concrete 1 Bank Run/Gravel	e Waterial	Outside	Branch Material
red .	2 Steel 2 Mechanical Joint	02 Pitted 2	1 Copper 2 Lead
A Asphalt/Concrete 3 Bock	ron 3	03 Smooth 3	Galvanized Steel/Black Iron
r(5 Asbestos Cement (Transite) 5 Fiange	04 Not Visible 4	Brass Pinetic
ונהו	Copper	Pipe Condition-Inside 6	Cast Iron
8 Driveway 8 Other-See Below	Not Visible	Helow 11 Heavy Tuberculation	7 Ductile Iron 8 Does Not Apply
Cut Size: 7		14 No Tuberculation 15 Not Visible 16 Other-See Below	G CHRI-SEE DRIOW
II. Utilities In Excavation: (Circle) 0 None 1 Sewer	2 Gas 3 Electric 4 Telephone 5 T.V. Cable 6	Car Rails 7 Other	
*	2 Leak - Joint, Valve, Fire Hydrant, Branch 3 New Installation* 4 /	Abandonment* (*Drawing on back — Y/N)	
	(Circle One Leak Type and One Repair Type From The Following Categories)	Type From The Following Categories)	
Main Break/Joint Leak Type	Valve Leak Type	Fire Hydrant Leak Type	Branch Leak Type
12 Longitudinal Crack	22 Bonnet Bolts	32 Outside Lead Leak	41 Ferrule 42 Stop Cock
13 Bell Crack 17 Coupling/Clamp	23 Defective Valve	33 Hydrant Valve	43 Inside Pipe Leak
material		Control Con Control	45 Service Saddle 49 Other-See Below
Main/Joint Repair Type 01 Caulk Joint	Valve Repair Type 01 Replace Existing Valve	Fire Hydrant Repair Type 01 Renew Existing Lead	Branch Repair Type
02 - Saulk & Clamp Joint '90 Install New Pipe/Fitting	Cap Bonnel/s		DZ Pieplace
Pipe & Coupling	Boit Replacement '90	install New F.H., Lead and	90 New Branch Installation
05 Repour Lead 99 Other-See Below 06 Replace Bolts 07 Replace fitting/cplg. 08 Tighten Coupling	05 Repack Stuffing Box New Valve 06 Replace Seal Plate '98 Abandon Valve 07 Replace Stern 99 Other-See Below 08 Replace Gears	*98 Abandon F.H., Lead and Valve 99 Other-See Below	*98 Abandon Branch 99 Other-See Below
Structure:	Structure:	Structure:	Structure:
Code:	Code:	Code:	Code:
Remarks/Other: Found and	around on to	upe, Zintalle S"	Lake Charle

4/90 шеүн

Crew Leader/Field Supervisor ATKINSON ARE

Pipe Size: 8" O.D.: Depth: Depth: Main to Box, Nearest Branch: 37 L. Existing Conditions/Materials: (Circle no more than two in each category) Pavement Types Excavated Material Pipe Mater 1 Concrete Callank Run/Gravel 2 Cinders 2 Steel 2 Annhalt/Concrete 2 Cinders 2 Steel	House No. & Stre	ed - " WU Poly FO E, GA Pipe C 01 Badly ©Pitted	Permit No Crew Ticket No No Crew Ticket No Crew Ticke
5 Low Type (gravel) 5 Fill 6 Sod 6 Dirt 7 Sidewalk 7 Sandy Soil 8 Driveway 9 Other-See Below 9 Cut Size:	4 Concrete 4 Compression Joint 5 Asbestos Cement (Transite) 6 Copper 6 Copper 7 Plastic 8 Not Visible 9 Other-See Below	Pipe Condition-Inside 11 Heavy Tuberculation 12 Medium Tuberculation 13 Light Tuberculation No Tuberculation 16 Other-See Below	4 Brass 5 Plastic 6 Cast Iron 7 Ductile Iron 8 Does Not Apply 9 Other-See Below
II. Utilities In Excavation: (Circle) (Dyone 1 Sewer Measurements: (Sketch on back — Y/6)	phone 5 T.V. Cable 6	Car Rails 7 Other G.M. 3.0 E	f EAST CUrb
	(Circle One Leak Type and One Repair Type From The Following Categories)	Type From The Following Categories)	
11 Circular Crack 12 Longitudinal Crack 13 Bell Crack 14 Corrosion Hole 15 Rusted Bolts 16 Bad Gasket/jt. material	tawe Leak Type 21 Stuffing Box 22 Bonnet Bolts 23 Defective Valve 29 Other-See Below	Fire Hydrant Leak Type 31 Inside Lead Leak 32 Outside Lead Leak 33 Hydrant Valve 39 Other-See Below	Branch Leak Type 41 Ferrule 42 Stop Cock 43 Inside Pipe Leak 44 Outside Pipe Leak 45 Service Saddle 49 Other-See Below
Main/Joint Repair Type 01 Caulk Joint 02 Caulk & Clamp Joint 03 Leak Clamp 04 Pipe & Coupling 05 Repour Lead 06 Replace Bolts 07 Replace fitting/cplg. 08 Tighten Coupling	Valve Repair Type 01 Replace Existing Valve 02 Replace Cap 03 Replace Bonnet/Stem 04 Bolt Replacement *90 Install, "Cut In" 05 Repack Stuffing Box New Valve 06 Replace Seal Plate *98 Abandon Valve 07 Replace Stem 99 Other-See Below 08 Replace Gears	Fire Hydrant Repair Type 01 Renew Existing Lead 02 Replace Existing F.H. Valve 03 Replace Existing F.H. Valve & Lead '90 Install New F.H., Lead and Valve '98 Abandon F.H., Lead and Valve 99 Other-See Below	Branch Repair Type 01 Repair 02 Replace 03 Disconnect '90 New Branch Installation '98 Abandon Branch 99 Other-See Below
Structure:Code:	Structure:	Structure:	Structure:
ner: (2) 510"	Couplings la	Branch in Middle . K	smoved a looplings and
11 Stalled & 010 26 Cex	Crew Leader/Field Supervis	13 contley god	responde 1 "forrula.
	Crew Leader/Field Supervisor	13 contley 5	6 STRZBATHER

rect 2485 E. Call by Cith Kd. Neighborhoo S. Weighborhoo S. Weighborhoo S. Weighborhoo S. Weighborhoo S. Weighborhoo S. Weighborhoo S. Cament Lined - v. Weighborhoo		Undergro	Underground Report	
arest Branch: 8 House No. & Street: 2405 £. Cement Lined - Y@You littons/Materials: (Circle no more than two in each attegory) Be Carelated Material Benk Run/Gravel Benk Run/Gravel Benk Run/Gravel Benk Run/Gravel Colorete Structure: Code:	House No. & Street: QTQS F. CTQ Location: 135 W OF IST	MLY E OF VIA	eighborhood:	Date 5 10 31 0 3 30 6 万 Crew Ticket Nの30503330な
Itions/Materials; (Order a more term wow in each catagory) Is Eccament Attended Eccament Ec	Pipe Size: 8" O.D.: N(A)	House No. & Stre	- YOU POIN	Main to C/L: / Q ' S
Becamble Maintein Pipe Maintein Land Candida Banch Maintein Candida Candida	. Existing Conditions/Materials: (Circle no more I	han two in each category)		Code:
Specific of Composition of Compositi	1 Br 2 Ci	Pipe Material 1 1 2	Pipe Condition-Outside 01 Badly Pitted 1 Co 02 Pitted 2 Les	Branch Material pper ad
6 Other-See Below 7 Sandy Seel 8 Other-See Below 8 Not Visible 7 Other-See Below 9 Other-See Below 9 Other-See Below 14 Not Tuberculation 14 Not Tuberculation 14 Not Tuberculation 15 Other-See Below 16 Circle one Seeling 15 Other-See Below 17 Coupling/Clamp 19 Other-See Below 17 Coupling/Clamp 19 Other-See Below 19 Other-See Below 10 Circle One Leak Type 21 Stuffing Box 22 Benefit Type 23 Suffing Box 22 Benefit Type 25 Stuffing Box 25 Other-See Below 17 Other-See Below 17 Other-See Below 18 Other-See Below 19 Other-See Below 10 Other-See Below 11 Farnula 12 Other-See Below 12 Other-See Below 13 Other-See Below 14 Other-See Below 15 Other-See Below 16 Other-See Below 17 Other-See Below 18 Other-See Below 19 Other-See Below 19 Other-See Below 10 Other-See Below 10 Other-See Below 10 Oth	crete 3 ne (mac) 4	le Iron rete ' 4	03 Smooth 3 04 Not Visible 4	Ivanized Steel/Black Iron ass
8 Other-See Below 8 Ant Mislate (2 Deformandation 14 No Tuberculation 14 No Tuberculation 15 Not Vabble 15 Not Vabble 16 Not Vabble 16 Not Vabble 17 Coupling/Clamp 18 Uniter-See Below 17 Coupling/Clamp 19 Uniter-See Below 19 Other-See Below 20 Other-See Below 21 Stuffing Bornet Make 22 Other-See Below 23 Defeative Valve 24 Replace Captaing Valve 25 Other-See Below 26 Replace Stuffing Bornet/Stem 39 Other-See Below 27 Replace Stuffing Bornet/Stem 39 Other-See Below 30 Other-See	7 66	Copper Plastic	Pipe Condition-Inside 6 Below 11_Heavy Tuberculation 7	st Iron ctile Iron
Cavalion: (Circle Order) Tits: (Sketch on back – Y/N) It (Circle one)	8 X 6	Not Visible Other-See Below	12 Medium Tuberculation 13 Light Tuberculation 14 No Tuberculation 15 Not Visible 16 Other-See Below	es Not Apply her-See Below
Valve Leak Type Valve Leak Type 21 Stuffing Box 17 Coupling/Clamp 18 WWC 19 Other-See Below Type 19 Other-See Below Type 10 Install New Piperfitting 19 GReplace Existing Valve 19 Other-See Below 10 Replace Stating Box 10 Replace Existing Valve 10 Replace Stating Box 10 Replace Stating FH, Valve 10 Replace Existing FH, Valve 10 Replace Existing FH, Valve 10 Replace Stating FH, Valve 10 Replace Existing	Measurements: (Sketch on back — Y/N)	nt, Valve, Fire Hydrant, Branch 3 New Installation*	4 Abandonment* (*Drawing on back — Y/N)	
17 Coupling/Clamp 18 WWC 18 WWC 19 Other-See Below 20 Other-See Below	*	3 ₪	Fire Hydrant Leak Type 31 Inside Lead Leak	Branch Leak Type 41 Ferrule
Joint Joint 198 Abandon Pipe/Fitting 198 Other-See Below 199 Other	17 18 19 erial	22 Bonnet Bolts 23 Defective Valve 29 Other-See Below	m	42 Stop Cock 43 Inside Pipe Leak 44 Outside Pipe Leak 45 Service Saddle 49 Other-See Below
Structure: Structure: Structure: Structure: Structure: Structure: Structure: Code:	mp Joint 90 mp Joint 90 lling 98 J 99 ts 99	we Repair Type Replace Existing Valve Replace Cap Replace Bonnet/Stem Bolt Replacement Repack Stuffing Box Replace Seal Plate Replace Stem	Fire Hydrant Repair Type 01 Renew Existing Lead 02 Replace Existing F.H. Valve 03 Replace Existing F.H. Valve *90 Install New F.H., Lead and *98 Abandon F.H., Lead and Va 99 Other-See Below	Branch Repair Type 01 Repair 02 Replace 03 Disconnect '90 New Branch installation '98 Abandon Branch 99 Other-See Below
CUT IN 58" OF OIP, Made connection with 2 pipe coupling of Slocktoped.	Structure:	Structure:	Structure:	Structure:
CUT IN 58" OF OIP, Made CONNECTION WITH 2 PIPE COUPTION OF ISLACK-FORD.	Code:	Code:	Code:	Code:
	Remarks/Other CUT IN 50	CK45	CONNECTION WITH 2	2

4/90 MPH 335 Nrds.

Crew Leader/Field Supervisor LINDSEY / BOILINGS

1//2	, / . Underground Report	ind Report ,	Report No.
House No. & Street:	USPINI I TO THE TAR	Sweighborhood FAC 12	
000	Depth: $48''$ Cemen	Cement Lined - YAWU Polywrapped - YAWU	Crew licket No.
Main to Box, Nearest Branch:	No. & Stre		Main to C/L: 18 5007H
l. Existing Conditions/Materials: (Circle no more than two in each category)		Code:	Code:
Pavement Types Excavated Material	Pipe Material Joint Types	Types Pipe Condition-Outside	Branch Material
2 Block Paved 2 Cinders	1 Lead 2 Steel 2 Machanical	01 Badly Pitted 1	Copper
Asphalt/Concrete 3	3 Ductile Iron (3) eadite	03 Smooth 3	Lead Galvanized Steel/Black Iron
4 Asphalt/Stone (mac) 5 Low Type (gravel) 5 Eill	Concrete 4	04 Not Visible 4	Brass
Sod (Slaver) 5	5 Asbestos Cement (Transite) 5 Flange 6 Copper 6 Not Visible	05 Other-See Below 5	Plastic
7 Sidewalk 7 Sandy Soil	Plastic	11 Heavy Tuberculation 7	Cast Iron
8 Driveway 8 Other-See Below 9 Other-See Below	sible	12 Medium Tuberculation 8	Does Not Apply
Cut Size: W. C.		,	
II. Utilities in Excavation: (Circle) (0 None 1 Sewer	2 Gas 3 Electric 4 Telephone 5 T.V. Cable 6	Car Rails 7 Other	
Measurements: (Sketch on back — YN)			
III. Maintenance: (Circle one) (1) Break 2 Leak - Joir	2 Leak - Joint, Valve, Fire Hydrant, Branch 3 New Installation* 4 Abandonment* (*Drawing on back — (Circle One Leak Type and One Repair Type From The Following Categories)	Abandonment' ('Drawing on back — YN) Type From The Following Categories)	
Main Break/Joint Leak Type (11) Dircular Crack	Valve Leak Type 21 Stuffing Box	Fire Hydrant Leak Type	
Longitudinal Crack	22 Bonnet Bolts	32 Outside Lead Leak	41 Ferrule 42 Stop Cock
13 Bell Crack 17 Coupling/Clamp 14 Corrosion Hole 18 WWC	23 Defective Valve 29 Other-See Below	33 Hydrant Valve	43 Inside Pipe Leak
15 Rusted Bolts 19 Other-See Below 16 Bad Gasket/jt. material			45 Service Saddle 49 Other-See Below
Main/Joint Repair Type 01 Caulk Joint	Valve Repair Type 01 Replace Existing Valve	Fire Hydrant Repair Type	Branch Repair Type
02 Caulk & Clamp Joint '90 Install New Pipe/Fitting		Replace Existing F.H. Valve	02 Replace
Pipe & Coupling *98	Bolt Rep	*90 Install New F.H., Lead and Valve	*90 New Branch Installation
05 Repour Lead 99 Other-See Below 05 Replace Bolts	05 Repack Stuffing Box New Valve	*98 Abandon F.H., Lead and Valve	98 Abandon Branch
07 Replace fitting/cptg. 08 Tighten Coupling	Replace Stem 99 Replace Gears	as other-see pelow	99 Other-See Below
Structure:	Structure:	Structure:	Structure:
Code:	Code:	Code:	Code:
Remarks/Other:	C NEXT TO Lead	JITE HUG FOR	DENO! CUE HIL
OH GENCY- USED	2' of 8" DI PIPE,	2.8" PIPE Couplings	95 Petrajaro

J Ch C	アー/ Undergrou	inderground Report	Report No.
Location: 97,2'S	To Song MINASI	— Neighborhood: <u>/ 【と名くにい</u> <i>M/含い</i> 状に必ず — Permit No	Date $27-7-5$
Pipe Size: 8 O.D.:	House No. & Street:	Cement Lined - YN/U Polywrapped	27.5
I. Existing Conditions/Materials: (Circle no more than two in each category)			Code:
Pavement Types Excavated Material 1 Concrete 1 Bank Run/Gravel 2 Block Paved 2 Cinders	Pipe Material Joint 1 Lead 2 Steel 2 Machanics		Branch Material
ic) 3	3 Ductile fron 3 Ductile fron 4 Concrete 4 Compression Joint	02)Pitted 03 Smooth 04 Not Visible	2 Lead 3 Galvanized Steel/Black Iron · ·
6 Sod (graver) 5 Fill	Asbestos Cement (Transite) 5 Copper 6	05 Other-See Below Pipe Condition-Inside	5 Plastic 6 Cast Iron
e Below S	8 Not Visible 9 Other-See Below	12 Medium Tuberculation	7 Ductile Iron 8 Does Not Apply
Cut Size:		14 No Tuberculation 15 Not Visible 16 Other-See Below	a Cilierose Below
II. Utilities In Excavation: (Circle) o Nons)। Sewer	2 Gas 3 Electric 4 Telephone 5 T.V. Cable 6	Car Rails 7 Other	
Measurements: (Sketch on back — YN) III. Maintenance: (Circle one) 1 Break 2 Leak - Jo	Leak - Joint, Valve, Fire Hydrant, Branch 3 New Installation* 4	Abandomont (Torming to be 1)	
	(Circle One Leak Type and One Repair		
	Valve Leak Type 21 Stuffing Box	Fire Hydrant Leak Type	Branch Leak Type
12 Longitudinal Crack 17 Counting/Clamp	22 Bonnet Bolts	32 Outside Lead Leak	41 Ferrule 42 Stop Cock
Corrosion Hole Rusted Bolts	29 Other-See Below	39 Other-See Below	43 Inside Pipe Leak ' 44 Outside Pipe Leak
16 Bad GaskeVjt. material			45 Service Saddle 49 Other-See Below
01 Caulk Joint 02 Caulk & Clamp Joint	Valve Repair Type 01 Replace Existing Valve 02 Replace Can	Hydrant Repair Type Renew Existing Lead	Branch Repair Type 01 Repair
	Replace Bonnet/Stem	02 Replace Existing F.H. Valve & Lead	02 Replace 03 Disconnect
05 Repour Lead 99 Other-See Below	04 Bolt Replacement *90 Install, "Cut In" 05 Repack Stuffing Box New Valve	*90 Install New F.H., Lead and Valve	90 New Branch Installation
Replace Bolts Replace fitting/cplg. Tighten Coupling	Replace Replace Replace	98 Abandon F.H., Lead and Valve 99 Other-See Below	98 Abandon Branch 99 Other-See Below
Structure:	Structure:	Structure:	Structure:
Code:	Code:	Code:	Code:
Remarks/Other: 28 Tipe (exp/145 6 95	8,018	
Telliars/Offier.	- 7	ン , <	

1 PIECE OF FOLYWARD	- B" PiPe COUPLINGS	USGD: 51" OF 8"D. I.P. / Z	Remarks/Other: MATCOURLS US
Code:	Code:	Code:	Code:
Structure:	Structure:	Structure:	Structure:
Branch Repair Type 01 Repair 02 Replace 03 Disconnect '90 New Branch Installation '98 Abandon Branch 99 Other-See Below	Fire Hydrant Repair Type 01 Renew Existing Lead 02 Replace Existing F.H. Valve 03 Replace Existing F.H. Valve & Lead '90 Install New F.H., Lead and Valve '98 Abandon F.H., Lead and Valve 99 Other-See Below	Valve Repair Type 01 Replace Existing Valve 02 Replace Cap 03 Replace Bonnet/Stem 04 Bolt Replacement '90 Install, "Cut In" 05 Repack Stuffing Box New Valve 06 Replace Seal Plate '98 Abandon Valve 07 Replace Stem 95 Other-See Below 08 Replace Gears	Main/Joint Repair Type 01 Caulk Joint 02 Caulk & Clamp Joint 03 Leak Clamp 64 Pipe & Coupling 05 Repour Lead 06 Replace Bolts 07 Replace fitting/cpig. 08 Tighten Coupling
Branch Leak Type 41 Ferrule 42 Stop Cock 43 Inside Pipe Leak 44 Outside Pipe Leak 45 Service Saddle 49 Other-See Below	Fire Hydrant Leak Type 31 Inside Lead Leak 32 Outside Lead Leak 33 Hydrant Vatve 39 Other-See Below	Valve Leak Type 21 Stuffing Box 22 Bonnet Bolts 23 Defective Valve 29 Other-See Below	Main Break/Joint Leak Type 11 Circular Crack (12 Longitudinal Crack (18 Bell Crack 17 Coupling/Clamp 14 Corrosion Hole 18 WWC 15 Rusted Bolts 19 Other-See Below 16 Bad Gasket/jl. material
	nment* (*Drawing on back — Y(N)) om The Following Categories)	2 Leak - Joint, Valve, Fire Hydrant, Branch 3 New Installation* 4 Abandonment* (* (Circle One Loak Type and One Repair Type From The Fol	111. Maintenance: (Circle one) (1) Break 2 Leak - Join
	s 7 Other	r 2 Gas 3 Electric 4 Telephone 5 T.V. Cable 6 Car Rails	II. Utilities in Excavation: (Circle) (2)None 1 Sewer Measurements: (Sketch on back — Y/N)
Code: Branch Material 1 Copper 2 Lead 3 Galvanized Steel/Black Iron 4 Brass 5 Plastic 6 Cast Iron 7 Ductlle Iron 8 Does Not Apply 9 Other-See Below	Pipe Condition-Outside Pipe Condition-Outside Pipe Condition-Outside Pipe Condition-Outside Pipe Condition-Outside Pipe Condition-Inside Pipe Condition-Outside Pipe Condition-Inside Pipe Condition-Insi	Coucies Correle no more than two in each category) Pavement Types Excavated Material Pipe Material Concrete 1 Bank Run/Gravel 2 Steel 2 Cinders 2 Steel 3 Rock 3 Rock 4 Concrete 3 Rock 4 Concrete 5 Fill 5 Asbestos Cement (Transite) 5 Finge 6 Dirt 7 Sindewalk 7 Cinher-See Below 1 Copper 7 Cinher-See Below 1 Copper 2 Cinders 2 Cinders	I. Existing Conditions/iMaterials: (Circle no more than two in each category) Pavement Types Excavated Material Concrete 1 Bank Run/Gravel 2 Cinders 3 Rock 3 Rock 4 Asphalt/Concrete 4 Asphalt/Stone (mac) 5 Low Type (gravel) 6 Sod 7 Sidewalk 8 Other-See Below 9 Other-See Below 9 Other-See Below 1 Cast Iron 2 Steel 3 Ductile Iron 4 Concrete 5 Asbestos Cement 6 Copper 7 Sidewalk 8 Other-See Below 9 Other-See Below
Main to C/L: / Z' X	Lined - YMU Polywrapped - YMU -458 & GALBOLFIH RS	A Depth: 59" Cement Lined - YM	Pipe Size: 8' O.D.: 1/

Location: _

House No. & Street: _

Street: 2448 & GALBRA, THE PONNEST W. Neighborhood

— Neighborhood: ReAD/NG

Permit No.

Crew Ticket No. 06-1/6213-00

4/90 EDEYR

Craw | content Field Summing) (HATMAN) > h/KS HAN (50h)

	Underground Report	ind Report	Report No.
House No. & Street: 2455 2	= GALBRAITH KD	Neighborhood: Keading	Date 8-11-01
Location: 5.5, 27' Eor 18	TEH. Enot VINCA	Permit No.	Crew Ticket No.
Pipe Size:O.D.:	Depth: LY" Cemer	Cement Lined - YMDU Polywrapped - YMDU	
Main to Box, Nearest Branch:	House No. & Street:		Main to C/L: 16 N
I. Existing Conditions/Materials: (Circle no more than two in each category)	than two in each category)		I. Existing Conditions/Materials: (Circle no more than two in each category)
Pavement Types Excavated Material 1 Concrete 1 Bank : Run/Gravel	- 22 21	Outside	anch Material
red 2	22 -	02 Pitted 2	Lead MAIN 18
crete 3	le iron 3	03 Smooth	Galvanized Steel/Black Iron
5 Low Type (gravel) 5 Fill	5 Asbestos Cement (Transite) 5 Flange	05 Other-See Below 5	Plastic
Sod.: 6	Copper	Pipe Condition-Inside 6	Cast Iron
7 Sidewalk 7 Sandy Solf 8 Driveway 8 Other-See Below	7 Plastic 7 Other-See Below 8 Not Visible	11 Heavy Tuberculation (2) Medium Tuberculation	7 Ductile Iron Does Not Apply
Cut Size: 6 X &			
II. Utilities in Excavation: (Circle) 0 None 1 Sewer	Ggy 3 Electric 4 Telephone 5 T.V. Cable 6	Car Rails 7 Other GAS BRANCH	1. PLASTIC CROSSING HOS
Measurements: (Sketch on back — y@)			
III. Maintenance: (Circle one) 1 Break 2 Leak - Joi	2 Leak - Joint, Valve, Fire Hydrant, Branch 3 New Installation* 4 Abandonment* (* (Circle One Leak Type and One Repair Type From The Fol	4 Abandonment* (*Drawing on back — Y(V)) air Type From The Following Categories)	
Main Break/Joint Leak Type 11 Circular Crack	Valve Leak Type 21 Stuffing Box	Fire Hydrant Leak Type 31 Inside Lead Leak	Branch Leak Type 41 Ferrule
Longitudinal Crack Bell Crack 17	22 Bonnet Bolts 23 Defective Valve	32 Outside Lead Leak 33 Hydrant Valve	42 Stop Cock 43 Inside Pipe Leak
15 Rusted Bolts 19 Other-See Below 16 Bad Gasket/jt. material	29 Other-See Below	39 Other-See Below	44 Outside Pipe Leak 45 Service Saddle 49 Other-See Below
nair Type mp Joint	Valve Repair Type 01 Replace Existing Valve 02 Replace Cap		Branch Repair Type 01 Repair 02 Replace
Dipe & Coupling 198 Abandon Pipe/Fitting 198 A	04 Bolt Replacement '90 Install, "Cut In" 05 Repack Stuffing Box New Valve 05 Replace Seal Plate '98 Abandon Valve	*90 Install New F.H., Lead and Valve *98 Abandon F.H., Lead and Valve 99 Other-See Below	*90 New Branch Installation *98 Abandon Branch 99 Other-See Below
07 Heplace fitting/cptg. 08 Tighten Coupling	08 Replace Gears		
Structure:	Structure:	Structure:	Structure:
Code:	Code:	Code:	Code:
Remarks/Other: lut in 90"	of 8" D.T. Pipe w/c	supling and backy	iled and applied whole
	0		

4/00

And how

9477	Underground Report	0	Report No.
Location: 15 W of 157 F	H W. of HARTER LO	_ Neighborhood:	Date (1) (b)
Pipe Size: 8" O.D.:	Depth: 63% Cement	Gement Lined - Y(N)U Polywrapped - Y(N)U	Crew licket NO.
Main to Box, Nearest Branch:	House No. & Street:	(H)	Main to C/L: 14' *
ions/Materi	han two in each category)	Code:	Code:
	1) Cast Iron 1 Lead	Pipe Condition-Outside 01 Badly Pitted	Branch Material
2 Block Paved 2 Cinders 3 Asphalt/Concrete 3 Rock	Steel Steel	02 Pitted 2	
ac)	Concrete	04 Not Visible 4	3 Galvanized Steel/Black Iron CUKU 4 Brass
	5 Asbestos Cement (Transite) 5 Flange 6 Copper 6 Not Visible	05 Other-See Below 5	Plastic Cast Iron
7 Sidewalk 7 Sandy Soil 8 Driveway 8 Other-See Below		11 Heavy Tuberculation	Ductile fron
9 Other-See Below State 9 Cut Size: 9 C	≨	13 Light Tuberculation 9 1	9 Other-See Below
	•	16 Other-See Below	
II. Utilities In Excavation: (Circle) (0 None 1 Sewer	2 Gas 3 Electric 4 Telephone 5 T.V. Cable 6	Car Rails 7 Other	
Measurements: (Sketch on back Y/N)		7,0	
III. WAIIIE HAIICE: (Circle One) 1 Break) 2 Leak - Join	2 Leak - Joint, Valve, Fire Hydrant, Branch 3 New Installation* 4 Abandonment* (*Drawing on back — (Circle One Leak Type and One Repair Type From The Following Categories)	4 Abandonment (*Drawing on back — Y/N) sir Type From The Following Categories)	
	Valve Leak Type 21 Stuffing Box	Fire Hydrani Leak Type 31 inside Lead Leak	Branch Leak Type 41 Ferrule
13 Bell Crack 17 Coupling/Clamp	22 Bonnet Bolts 23 Defective Valve	Outside	42 Stop Cock
Hole 18 Its 19 It/jt. material	29 Other-See Below	39 Other-See Below	43 inside Pipe Leak 44 Outside Pipe Leak 45 Service Saddle
Main/Joint Repair Type	ir Type	Fire Hydrant Repair Type	Branch Repair Type
02 Caulk & Clamp Joint 90 Install New Pipe/Fitting	02 Replace Cap 03 Replace Bonnet/Stem	01 Henew Existing Lead 02 Replace Existing F.H. Valve 03 Replace Existing F.H. Valve & Lead	01 Repair 02 Replace
US Repour Lead 99 Other-See Below	04 Bolt Replacement '90 Install, "Cut In" 05 Repack Stuffing Box New Valve		*90 New Branch Installation
от неріасе ditting/cplg. 07 Replace fitting/cplg. 08 Tighten Coupling	06 Replace Seal Plate '98 Abandon Valve 07 Replace Stem 99 Other-See Below 08 Replace Gears ·	99 Other-See Below	99 Other-See Below
Structure:	Structure:	Structure:	Structure:
Code:	Code:	Code:	Code:
Remarks/Other: REMOVED 8" KEA	DITE HUB LOOKING EAS	T. DRESSED in 4	1 8 " DIP
7- 8 1.00 Con			
4/90 EDEYR	Crew Leader/Field Supervisor	or A BROWN -	NICE/BY !

House No. & Street: 2455 E. G.	AEBRAITH SILVERY	=	Report No
Location: 20' W. IST FI	& VINCA	Neighborhood:	Date 12-7-92
Pipe Size: 8" O.D.: No Ning	Depth: 63"	Permit No.	Crew Tick
Main to Box, Nearest Branch: 6	House No. & Street:	et: SAME	
tions/Mater	than two in each category)		
1 Concrete 1 Park 5 (America)	Pipe Material	Inint Tunes	_
2 Block Paved 2 Cinders	Iron 1 Lead	Pipe Condition-Outside 01 Badly Pitted	Branch Material
	2 Steel 2 Mecha 3 Ductile Iron 3 Leadin	Ical Joint	1 Copper 2 Lead
5 Low Type (gravel) 5 Fill	Concrete 4	ssion Joint	3 Galvanized Steel/Black Iron
on c	s Cement (Transite) 5	05 Other-Sea Balow	
7	7 Plastic 7 Oliver	sible	6 Cast Iron
9 Other-See Below 1		Cural See Below 11 Heavy Tuberculation	Ductile Iron
Cut Size: ジメ6	. W Ciner-See Below	13 Light Tuberculation	9 Other-See Below
		(18) Not Visible 18 Other-See Below	
II. Utilities in Excavation: (Circle) (Dione 1 Sewer	ar 2 Gas 3 Electric 4 Telephone 5 T.V. Cable	6 Car Rails 7 Other	
Measurements: (Sketch on back — Y/N)			
III. Maintenance: (Circle one) (1 Break 2 Leak - Joint, Valve, Fire Hydrant, Branch	nt, Valve, Fire Hydrant, Branch 3 New Installation*	4 Abandonment* (*Drawing on back — Y/N)	***************************************
Mein Break/Joint Leak Type	Valve Leak Type	ype	
12 Longitudinal Crack	21 Stuffing Box	Fife Hydrani Leak Type	Branch Leak Type
13 Bell Crack 17 Coupling/Clamp	22 Bonnet Bolts 23 Defective Valve	32 Outside Lead Leak	41 Ferrule
ole 18	29 Other-See Below	33 Hydrant Valve	43 Inside Pipe Leak
16 Bad Gasket/jt. material		Se Ciner-See Below	44 Outside Pipe Leak 45 Service Saddle
01 Caulk Joint	Valve Repair Type	Fire Hydran Danet Time	. 49 Other-See Below
02 Caulk & Clamp Joint		01 Renew Existing Lead	Branch Repair Type
Leak Clamp	03 Replace Cap	02 Replace Existing F.H. Valve	01 Repair 02 Replace
05 Repour Lead an Other Ser Briting	04 Bolt Replacement *90 Install, "Cut In"	'90 Install New EH and and Value	03 Disconnect
06 Replace Bolts	Hepack Stuffing Box	'98 Abandon F.H., Lead and Valve	*90 New Branch Installation
07 Replace fitting/cplg. 08 Tighten Coupling	O7 Replace Stem 99 Other-See Below 08 Replace Gears	99 Other-See Balow	98 Abendon Branch 99 Other-See Below
Structure:	Structure:		
Code:		Structure:	Structure:
	COUG	Code:	Code:
Remarks/Other:			

4/90 EIEYR

Crew Leader/Field Supervisor LUCKEY, Holanda

ONDERGROUND REPORT	LEAK
HOUSE NO. & STREET 2488 E. GAIBRAITH Rd DATE 1-23-81	Joint Pige Branch
PERMIT NO. LOCATION 1871/2 E. OF 5Th FH. W.	NEW WORK
F Ric	Install. Conn. Other
c/1./3//a′	(Direction) S PIPE SIZE 8
PAVING MHC 4' X5' DEPTH 50"	1 1
TYPE OF PIPE & JOINT C. I. P. P. JOINT UNKNOWN	
SOIL CONDITION (Circle One) - Bank Run - Cinders - Rock - Clay - Fill - Dirt)-	Other
PIPE CONDITION (Circle One) - Outside: - Badly Pitted - Pitted - Smooth	Other
Inside: Tuberculation - Heavy - Wedium - Light -	t - None
OCATION OF OTHER UTILITIES IN EXCAVATION $\mathcal{N}o\mathcal{N}\rho$	
REASON FOR EXCAVATION - Branch Installation (Size) Connection (Size)	lze & Type)
Date Time Service Branch Leak (Circle One) - Tapping Sa	1
On Service Branch Material (Circle One) - Copper - Lead - Br On Main Break (Circle One) (Cir.Crack) - Long crack - Bell Cr	Brass - Other Crack -
Has there construction in area? Yes (No) By whom? Extent	nt of damage
of repair; descr. of break) Discovered Ci	AR CRACK
シンシン・・・ の ト のに つこたことに たのけた	CIHMIO.
For	Foreman: Flowers

Use other side for sketch if necessary. Check here

macr	EATH/ESEHMI	Crew Leader/Field Supervisor	/90 周 長YR
			BARS ON MAIN
t could not put	a second stoceT	ohalt there is which	emarks/Other: ろっぃのモル らら
Code:	Code:	Code:	ode:
Structure:	Structure:	Structure:	tructure:
	I	Replace Stem Replace Gears	97 Replace fitting/cplg. 98 Tighten Coupling
Abandon Brar Other-See Bel	*98 Abandon F.H., Lead and Valve	Replace Seal Plate *98 Aband	
03 Disconnect 03 Disconnect 09 New Branch Installation	02 Heplace Existing F.H. Valve & Lead 03 Replace Existing F.H. Valve & Lead *90 Install New F.H. Lead and Valve	02 Replace /Cap 03 Replace Bonnet/Stem 04 Bott Replacement	22 Caulk & Clamp Joint 132 Leak Clamp 139 Install New Pips/Fitting 144 Biba & Clamp Joint 145 Pipa & Clamp Joint 157 Pipa & Clamp Joint 158 Pipa
Branch Repair Type 01 Repair		r Type Existing Valve	Main/Joint Repair Type 11 Caulk Joint
49 Other-See Below	\nearrow	_	16 Bad Gasket/jt. material
44 Quiside Pipe Leak 45 Service Saddle	39 Other-See Relow		14 Corrasion Hale 18 WWC 15 Rusted Bolts 19 Other-See Below
Inside B	33 Hydrant Valve	valve	3 Bell Crack 17 Coupling/Clamp
41 Ferfule 42 Ston Sock	31 Inside Lead Leak 32 Autside Lead Leak		1 Ci)cular Crack
Branch Leaf. Tupp	Fire Hudgan Leak Tope	16.4	
	nment* (*Drawing on back — Y/N) om The Following Categories)	Heak - Joint, Valve, Fire Hydrant, Branch 3 New Installation' 4 Abandonment' ('Drawing on back — (Circle One Leak Type and One Repair Type From The Following Categories)	, Maintenance: (Circle one) (Break 2 Leak - Jo
The state of the s	s 7 Other	ver 2 Gas 3 Electric 4 Telephone 5 T.V. Cable 6 Car Rails	. Utilities in Excavation: (Circle) 0 Noné 1 Sewer Measurements: (Skeich on back — Y/N)
Other-See Below	13 Light Tuberculation 9 Co. 14 No Tuberculation 15 Not Visible 16 Other-See Below	9 Other-See Below	other-See Below 8/2
7 Ductile Iron 8 Daes Not Apply	Heavy Tuberculation 7 Medium Tuberculation 8		Sidewalk 7 Sandy Soll Driveway 8 Other-See Below
Cast Iron	e Condition-Inside 6	Copper	6
Plastic Pastic	04 Not Visible 4 05 Other-See Below 5	4 Concrete 5 Asbestos Cement (Transite) 5 Flange	Asphalt/Stone (mac) 4 Clay Low Type (gravel) 5 Fill
Galvanized Steel/Black Iron	@3-&mooth 3	Ductile Iron	(<u>(</u> (
Lead	Pitted		èd
{ Branch Material	Pipe Condition-Outside	Pipe Material Joint Types	Pavement Types Excavated Material Concrete 1 Bank Bun/Gravel
Code:		than two in each category)	Existing Conditions/Materials: (Circle no more than two in each category)
Main to CAL Y N M A C		lain to Box, Nearest Branch: Main to Use No. & Street: Main to Use No. & Street: Main to Use	lain to Box, Nearest Branch:
こう アクティングの行	d WN/U Polywrapped - YJY/U	Depth:Cement Linea	be size:
	3	7/,	į
Crew Ticket No.08-010647-0	Permit No.	+ MLU SOF MARY & rest	ocation: 85' South of 15.
Date 1/2 6/08	Neighborhood: KEADING	CALBRATH Noice	louse No. & Street: 246
Report No.	Report	Underground Report	

	Underground Repor	7	Report No.
House No. & Street: 27 7 7 Co 200 1723	S. a. MAKA ADOSTAR.	_ Neignborhood:/C/////	Craw Ticket No.0 8-074848-00
	45-7	Cement Lined - Y/N/) Polywrapped - Y/N/U	(1) (n):
I. Existing Conditions/Materials: (Circle no more than two in each category)	han two in each category)		L Existing Conditions/Materials: (Circle no more than two in each category)
Pavement Types Excavated Material 1 Concrete 1 Bank Run/Gravel	Pipe Material Joint Types	Pipe Condition-Outside 01 Badly Pitted	Branch Material Copper
ved 2	ron	03 Smooth 3	2 Lead 3 Galvanized Steel/Riack Iron
ac) (4)	Concrete 4	04 Not Visible 4	Brass
5 Low Type (gravel) 5 FIII 6 Sod*: (6.Dirt	5 Asbestos Cement (Transite) 5 Flange 6 Copper 6 Not Visible	05 Other-See Below 5 F Pipe Condition-Inside 6 (Plastic Cast Iron
Sidewalk 7		11 Heavy Tuberculation 7	Ductile Iron
Gunt Size: 4 6 1 8 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	9 Other-See Below	13 Light Tuberculation (9) 14 No Tuberculation (14 No Tuberculation 15 Not Visible 16 Other-See Below	Other-See Below
Measurements: (Sketch on back — Y/Ŋ)	Valve, Fire Hydrant, Branch 3 New Installation* (Circle One Leak Type and One Rep	4 Abandonment* (*Drawing on back — Y/﴿) air Type From The Following Categories)	
Main Break/Joint Leak Type 11 Circular Crack	Valve Leak Type 21 Stuffing Box	Fire Hydrant Leak Type 31 Inside Lead Leak	Branch Leak Type 41 Ferrule
13 Bell Crack 17 Coupling/Clamp 14 Corrosion Hole 18 WWC 15 Rusted Bolts 19 Other-See Below 16 Bad Gasket/Jt. material	23 Defective Valve 29 Other-See Below	33 Hydrant Valve 39 Other-See Below	43 Inside Pipe Leak 44 Outside Pipe Leak 45 Service Saddle 49 Other-See Below
Main/Joint Repair Type 01 Caulk Joint 02 Caulk & Clamp Joint 03 Leak Clamp 190 Install New Pipe/Fitting 196 Abandon Pipe/Fitting 196 Repour Lead 196 Replace Bolts 197 Replace Ilting/cplg.	Valve Repair Type 01 Replace Existing Valve 02 Replace Cap 03 Replace Bonnet/Stem 04 Bott Replacement '90 Install, "Cut In" 05 Repack Stuffing Box New Valve 06 Replace Seal Plate '98 Abandon Valve 07 Replace Stem 99 Other-See Below	Fire Hydrant Repair Type 01 Renew Existing Lead 02 Replace Existing F.H. Valve 03 Replace Existing F.H. Valve & Lead '90 Install New F.H., Lead and Valve '98 Abandon F.H., Lead and Valve 99 Other-See Below	Branch Repair Type 01 Repair 02 Replace 03 Disconnect *90 New Branch Installation *98 Abandon Branch 99 Other-See Below
Structure:	Structure:	Structure:	Structure:
Code:	Code:	Code:	Code:
Remarks/Other: CARLOVEOUNA 3.p.	LETPEPA GOING TO A KENDET	13 Aus CRAW COT OUTHUB	BANDAU OJ SPITZ
		11 3-11	

Value. Megaluss, Nipolest Couplings.	OL AMJ VALVE, MEGALU	in + broke, Replace with	Remarks/Other: 8 MLV Was Down
Code:	Code:	Code:	Code:
Structure:	Structure:	Structure:	Structure:
Branch Repair Type 01 Repair 02 Replace 03 Disconnect *90 New Branch Installation *98 Abandon Branch 99 Other-See Below	Fire Hydrant Repair Type 01 Renew Existing Lead 02 Replace Existing F.H. Valve 03 Replace Existing F.H. Valve & Lead '90 Install New F.H., Lead and Valve '98 Abandon F.H., Lead and Valve 99 Other-See Below	Valve Repair Type 01 Replace Existing Valve 02 Replace Cap 03 Replace Bonnet/Stem 04 Bolt Replacement '90 Install, "Cut In" 05 Repack Stuffing Box New Valve 06 Replace Seal Plate '98 Abandon Valve 07 Replace Stem 99 Other-See Below 08 Replace Gears	Main/Joint Repair Type 01 Caulk Joint 02 Caulk & Clamp Joint 03 Leak Clamp 04 Pipe & Coupling 05 Repour Lead 06 Replace Bolts 07 Replace fitting/cplg. 08 Tighten Coupling
Branch Leak Type 41 Ferrule 42 Stop Cock 43 Inside Pipe Leak 44 Outside Pipe Leak 45 Service Saddle 49 Other-See Below	Fire Hydrant Leak Type 31 Inside Lead Leak 32 Outside Lead Leak 33 Hydrant Valve 39 Other-See Below	Valve Leak Type 21 Stuffing Box 22 Bonnet Bolts 23 Defective Valve 29 Other-See Below	Main Break/Joint Leak Type 11 Circular Crack 12 Longitudinal Crack 13 Bell Crack 14 Corrosion Hole 15 Rusted Bolts 19 Other-See Below 16 Bad Gasket/jt. material
	Car Ralls 7 Other	2 Gas 3 Electric 4 Telephone 5 T.V. Cable 6 (Anver Fire Hydrant, Branch 3 New Installation* 4 (Circle One Leak Type and One Repair	II. Utilities in Excavation: {Circle} (O'None 1 Sewer Measurements: (Sketch on back — Y/N)
Pipe Condition-Outside Branch Material 1 Copper 1 Copper 2 Lead 2 Lead 3 Smooth 3 Galvanized Steel/Black Iron 04 Not Visible 4 Brass 05 Other-See Below 5 Plastic Pipe Condition-Inside 6 Cast Iron 12 Medium Tuberculation 7 Ductile Iron 12 Light Tuberculation 5 Other-See Below 14 No Tuberculation 9 Other-See Below 15 Not Visible 16 Other-See Below 16 Other-See Below 17 Ductile Iron 17 Ductile Iron 18 Does Not Apply 18 Does Not Apply 19 Other-See Below 19	Pipe Condition-Outside 01 Badly Pitted 02 Pitted 03 Smooth 04 Not Visible 05 Other-See Below 11 Heavy Tuberculation 12 Medium Tuberculation 14 No Tuberculation 15 Not Visible 16 Other-See Below	I. Existing Conditions/Materials: (Circle no more than two in each category) Pavement Types Excavated Material 1 Bank Run/Gravet 2 Block Paved 2 Cinders 3 Asphalt/Concrete 3 Anock 4 Concrete 4 Concrete 5 Low Type (gravet) 5 Fill 6 Sod: 7 Sandy Soll 8 Other-See Below 9 Other-See Below Gut Size: 5 Conditions/Materials: (Circle no more than two in each category) Pipe Material 1 Lead 2 Mechanical Joint 2 Mechanical Joint 3 Acphalt/Concrete 4 Compression Joint 5 Flange 6 Not Visible 7 Cut Size: 9 Other-See Below 9 Other-See Below 9 Other-See Below	I. Existing Conditions/Materials: (Circle no more than two in each category) Pavement Types Excavated Material Concrete Block Paved Asphalt/Concrete Asphalt/Stone (mac) Sod: Fill Sod: Tisidewalk Cut Size: Figure (Size: Figure (Size:
Crew Ticket No. 0 108088000	Permit No ned - YNU Polywrapped - YNU E CAL Braith	Meter Pit House No. & Street: 2896	Pipe Size: S O.D.: O.D.: Main to Box, Nearest Branch: 4/3 Te
Date 8 28107	Neighborhood: AMDENY	Talbraith Rd	House No. & Street: RGRO E C

Underground Report

Report No.

Date 8 2807

4/90

EVE E

Crew Leader/Field Supervisor We Wash

0000	Underground Report	nd Report	Report No.
Location: 358, 87	STEN WARRING	Neighborhood: ATM BER	Y Date _ 8, 5, 5, 5
Pipe Size: 8 /c O.D.:	Depth: 6-7 1c Cemen	rement Lined - Y/N/U Polywrapped - Y/N/U	Crew licket No.
Main to Box, Nearest Branch:	House No. & Street:		Main to C/L:
I. Existing Conditions/Materials: (Circle no more than two in each category)	than two in each category)		Code:
Pavement Types Excavated Material 1 Concrete 1 Bank Bunk Concrete		Pipe Condition-Outside	Branch Material
2 Block Paved 2 Cinders	2 Steel 2 Mechanical Joint	01 Badly Pitted . 1 Cc	1 Copper
Asphalt/Concrete	Ductile Iron	(03) Emooth 3	Galvanized Steel/Black Iron
4 Aspnair/stone (mac) (4)Clay 5 Low Type (gravel) 5 Fill	4 Concrete 4 Compression Joint 5 Asbestos Cement (Transite) 5 Fiance	04 Not Visible	Brass
Sod 6	Copper Contain (maising)	Ob Other-See Below 5 Pig Pips Condition-Inside 6 Ca	Plastic Cast Iron
7 Sidewalk 7 Sandy Soil 8 Driveway 8 Other-See Below	7	11 Heavy Tuberculation	Ductile Iron
Below S	9 Other-See Below	13)Light Tuberculation 9 On	9 Other-See Below
		15 Not Visible 16 Other-See Below	
II. Utilities In Excavation: (Circle 0 None 1 Sewer	2 Gas 3 Electric 4 Telephone 5 T.V. Cable	6 Car Rails 7 Other	
	2 Leak - Joint, Valve, Fire Hydrant, Branch 3 New Installation* 4 Abandonment* ("Drawing on back — (Circle One Leak Type and One Repair Type From The Following Categories)	Abandonment* ("Drawing on back — Y/N) Type From The Following Categories)	
Main Break/Joint Leak Type 11 Circular Crack	Valve Leak Type 21 Stuffing Box	Fire Hydrant Leak Type	Branch Leak Type
Longitudinal Crack	22 Bonnet Bolts	32 Outside Lead Leak	41 Ferrule 42 Stop Cock
14 Corrosion Hole 18 WWC 15 Rusted Bolts 19 Other-See Below	23 Defective Valve 29 Other-See Below	33 Hydrant Valve 39 Other-See Below	43 Inside Pipe Leak 44 Outside Pipe Leak
<u> 65</u>			45 Service Saddle 49 Other-See Below
Main/Joint Repair Type 01 Caulk Joint 02 Caulk & Clamp Joint	Valve Repair Type 01 Replace Existing Valve 02 Replace Can	Hydrant Repair Type Renew Existing Lead	Branch Repair Type 01 Repair
Leak Clamp *90	Replace Bonnet/Stem	03 Replace Existing F.H. Valve & Lead	02 Replace 03 Disconnect
US Repour Lead 99 Other-See Below	Bolt Replacement Repack Stuffing Box	*90 Install New F.H., Lead and Valve *98 Abandon F.H., Lead and Valve	'90 New Branch Installation '98 Abandon Branch
07 Replace fitting/cplg. 07 Tighten Coupling	07 Replace Stem 99 Other-See Below 08 Replace Gears	99 Other-See Below	99 Other-See Below
Structure:	Structure:	Structure:	Structure:
Code:	Code:	Code:	Code:
Remarks/Other: <u>REPUDUED Spl</u>	TIEADIT HUB, INST	Aller 28.5 of 8")	10, 2-8" P.C.
4/90 BIEYA	Crew Leader/Field Supervisor		11/15/20

House No. & Street: 2420 +C:	St Calbrath Rd &	Neighborhood: Andria	Report No. (2-人・グ・データ S
Location: CON OTHER YO	70750		Crew Ticket No.
Pipe Size: O.D.:	Depth: 52 Ceme	Cement Lined - Y/N/Û: Polywrapped - Y/N/U	-
Main to Box, Nearest Branch:/V_/"	House No. & Street:	4	Main to C/L: 10 Sculh
tions/Materials: (Circle no mon	than two in each category)		Corle:
Pavement Types Excavated Material Concrete 1 Bank Run/Gravel	ial 1 Laari	-Outside	Branch Material
2 Block Paved 2 Cinders 3 Asphalt/Concrete 3 Rock	י באינ	<u> </u>	per
ac) 4	4 Concrete 4 Compression Joint	03 Smooth 3	Galvanized Steel/Black Iron
5 Low Type (gravel) 5 Fill 6 Sod (6) Dirt	s Cement (Transite)		ii d
Sidewalk 7	7 Plastic 7 Other-See Below	Below 11 Heavy Tuberculation 7	Cast Iron
8 Other-See Below 9 Other-See Below	Not Visible	12 Medium Tuberculation	B Does Not Apply
Cut Size:	a Ciliat-oee Delaw	13 Light Tuberculation 9 Othe 14 No Tuberculation (15 Not Visible 16 Other-See Below	Other-See Below
II. Utilities In Excavation: (Circle) (0 None 1 Sewer Measurements: (Sketch on back — γ/N)	2 Gas 3 Electric 4 Telephone 5 T.V. Cable 6	Car Rails 7 Other	
III. Maintenance: (Circle one) (1) Break 2 Leak - Jo	2 Leak - Joint, Valve, Fire Hydrant, Branch 3 New Installation* 4 (Circle One Leak Type and One Repair	Jrant, Branch 3 New Installation* 4 Abandonment* (*Orawing on back Y/N) (Circle One Leak Type and One Repair Type From The Following Categories)	
Main Break/Joint Leak Type 11 Circular Crack	∍ ⊣ [Fire Hydrant Leak Type	Branch Leak Type
rack	22 Bonnet Bolts	31 Inside Lead Leak 32 Outside Lead Leak	41 Ferrule
	29 Other-See Below	33 Hydrant Valve 39 Other-See Below	43 Inside Pipe Leak 44 Outside Pipe Leak 45 Service Saddle
	Valve Repair Type 01 Replace Existing Valve	Fire Hydrant Repair Type	Branch Repair Type
03 Leak Clamp Joint '90 Install New Pipe/Fitting 04 Pipe & Coupling '98 Abandon Pipe/Fitting	Stem	02 Replace Existing F.H. Valve 03 Replace Existing F.H. Valve & Lead	02 Replace 03 Disconnect
Repour Lead 99 Replace Bolts Replace fitting/cplg. Tighten Coupling	05 Replace Sears O5 Replace Stuffing Box New Valve O6 Replace Seal Plate *98 Abandon Valve O7 Replace Stem 99 Other-See Below	'90 Install New F.H., Lead and Valve '98 Abandon F.H., Lead and Valve 99 Other-See Below	*90 New Branch Installation *98 Abandon Branch 99 Other-See Below
Structure:	Structure:	Structure:	Structure:
	Code:	Code:	Code:
ricte -	racked	Ciround, Installed	1-Full Circle
	275		

4/90 meya

O Court Cond--/F:-14 O

AMBERLY (2 UNDERGROUND REPORT 12 6)	100
1 2 2 3	Joint Pipe Branch
	NEW WORK
UTTON 2634	Branch Install. Conn. Other
MAIN TO BOX NEAREST BRANCH (House No.) MAIN TO C/L // (Direct	(Direction) S PIPE SIZE &
PAVING MAC 673' DEPTH 5'-2"	
TYPE OF PIPE & JOINT C.1, P. LEADITE SOINT	
SOIL CONDITION (Circle One) - Bank Run - Cinders - Rock - Clay - Fill - Dirt) - (Other
PIPE CONDITION (Circle One) - Outside: - Badly Pitted - Pitted - Smooth -	Other
Inside: Tuberculation - Heavy - Medium - Light - Cement Lined: - Yes No Irregular Wall	- (None) 11 Thickness: Yes (No
LOCATION OF OTHER UTILITIES IN EXCAVATION N/Q N/E	
REASON FOR EXCAVATION - Branch Installation (Size) Connection (Size	ze & Type)
Main Date Time Service Branch Leak (Circle One) - Tapping Saddle - Ferrule Off 1-13-21 Service Branch Material (Circle One) - Copper - Lead - Brass	rrule - Curb Cock -Othe Brass - Other
:k - Bell	Crack - Spigot Crack -
Was there construction in area? Yes (No) By whom? Extent of Other reason for exc.	of damage
Remarks (Include type of repair; descr. of break) DRESSED IN 8" PIPE 2-8" PIPE COUPLINGS, 2-8" D.T. 12-1 PIECE FOLY WRA	1 to
MI ORIFICE	
Fore	Foreman:)s/, by grow
Use other side for sketch if necessary. Check here	71.000

FOREMAN: GERALD BOLAND AREA INSPECTOR	
	e the repaire. Used 1 8" Dresser leak clamp.
ile shilling to set a	demarks (Include type of repair; descr. of break) Electric division of CG & E who never note, wither our 8" transite water main outting a small hole in it
	Duilling to set a new power pole.
ent of damage in w.m.	a? (Yes)
Crack - Spigot Crack -	Cir.Crack - Long crack - Bell
Brass - Other	f 3-5-75 12:00 M. Service Branch Material (Circle One) - Copper - Lead -
Ferrule - Curb Cock -Othe	Main Date Time Service Branch Leak (Circle One) - Tapping Saddle - Fe
(Size & Type)	REASON FOR EXCAVATION - Branch Installation (Size) Connection (
	OCATION OF OTHER UTILITIES IN EXCAVATION None
Wall Thickness: Yes No	Cement Lined: - Yes No Irregular Wall
ht - None	Inside: Tuberculation - Heavy - Medium - Light
Other	PIPE CONDITION (Circle One) - Outside: - Badly Pitted - Pitted - Smooth -
- Other	SOIL CONDITION (Circle One) - Bank Run) - Cinders - Rock - Clay - Fill - Dirt
	TYPE OF PIPE & JOINT 8" TRANSITE
0.D	PAVING GRASS DEPTH 4.0
(Direction) S. PIPE SIZE 8	MAIN TO BOX NEAREST BRANCH 2.0 (House No.) 2940 MAIN TO C/L 8.0 (Dire
Install. Conn. Other	CREW NO E. OF COLERAIN AV.
NEW WORK	PERMIT NO. LOCATION G-ROESBECK
Joint (Pipe) Branch	HOUSE NO. & STREET 2940 W. GALBRAITH Rd. DATE MAR. 5, 1975
LEAK	UNDERGROUND REPORT

Use other side for sketch if necessary. Check here

POLITICAL SUBDS.AN COORD BLOCKFACE PIPE SEGMENT NoN COORDF COORD

IF BOX IS CHECKED SEE SKETCH ON OTHER SIDE 🔲 FIELD SUPRV.
CONSTRUCTION IN AREA: Y(N) BY WHOM? REMARKS CIRC. CRACIC INSTACLES & LCAIC CLAMP TO 14 OLGS ALSO IN PIPE
BRANCH SIZE CONNECTION (SIZE & TYPE)
INSTALLATION TYPE: FIRE HYDRANT: Y/N SERVICE BRANCH: Y/N
REPAIR: MANHOURS COST RESTORATION: MANHOURS COST
SERVICE BRANCH BREAK: Y/N BRANCH MATERIAL BRANCH LEAK TYPE BRANCH: SIZE DEPTH
MAIN BREAK: (9/N PIPE MATERIAL / JOINT TYPE MAIN LEAK TYPE PIPE: SIZE 3 O.D. DEPTH 3 PIPE COND.: OUTSIDE / INSIDE CEMENT LINED: Y/N POLY WRAPPED: Y/M VALVE LEAK MAIN LEAK TYPE

HOUSE NO. 2944 DIR. E STREET CARLIBRAITH TYPE TO DATE 11-4-86 LOCATION 184 医AST 好 300 EH - WEST 好 元, OGE CREW ID ABOUT / MAIN TO BOX NEAREST BR. HOUSE NO. MAIN TO C/L 10 DIRECTION 5
II WALER WORKS REPAIR UNDERGROUND

\W\\ TCD.

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הפתוחם משונתם שחוחו	OTHUN VIE
O O	LEAK
HOUSE NO. & STREET 2944 E. GAIBLAIT & DATE 3-37-80	Joint Pipe Branch
PERMIT NO. LOCATION /8/-5' E, 3Rd FH, W,	NEW WORK
CREW NO. 1717/es Ridge Rd	Install. Conn. Other
MAIN TO BOX NEAREST BRANCH (House No.) MAIN TO C/L 9' (Dire	(Direction) S PIPE SIZE 8
PAVING MAC 3'15' CUT DEPTH 4'	0.D. 97.03
TYPE OF PIPE & JOINT CITIPS, LEADITE JOINT	
SOIL CONDITION (Circle One) - Bank Run - Cinders - Rock - Clay - Fill - Dirt -	Other_
PIPE CONDITION (Circle One) - Outside: - Badly Pitted - Pitted - Smooth -	Other
Inside: Tuberculation - Heavy - Medium - Light	None
Cement Lined: - Yes (No) Irregular W	Wall Thickness: Yes (No
REASON FOR EXCAVATION - Branch Installation (Size)	(61-5-3-1)
Main Date Time Service Branch Leak (Circle One) - Tapping Saddle - Fer	Ferrule - Curb Cock -Other
Service Branch Material (Circle One) - Copper - Lead -	Brass - Other
Main Break (Circle One) Cir.Crack - Long crack - Bell Other	Crack - Spigot Crack -
as there construction in area? Yes (No) By whom? Extent	t of damage
Other reason for exc. 10 REPAIR 8" M.L.L. 14" OS	PIFICE
Remarks (Include type of repair; descr. of break) USed 1.5 pg 9"	D.I.P. (3 PC)
6 TON BACK FILL MATERIAL FROM	
SH-Swarpel S	Foreman: Plowers
Jse other side for sketch if necessary. Check here)
	- - - - - - - - -

de for sketch if necessary. Check here	for β_c
Pipe COUPLING 1-5'X7' G	
lude type of repair; descr. of break) <u>Oressed</u> IN Po OF Pipe Rifice 3/" Po 9" D.I. P. (3Pe)	Remarks (Include ty
construction in area? Yes (No) By whom? Extent of damage	Was there construct
Service Branch Material (Circle One) - Copper - Lead - Brass - Other	Off 2-26-80 ? On 2.26-803:0m
EXCAVATION - Branch Installation (Size) Connection (Size & Type) Time Service Branch Leak (Circle One) - Tapping Saddle - Ferrule - Curb Cock -Other	REASON FOR EXCAVATI
NONE	LOCATION OF OTHER U
Inside: Tuberculation - Heavy - Medium - Light - None Cement Lined: - Yes (No) Irregular Wall Thickness: Yes (No)	
(Circle One) - Outside: - Badly Pitted - (Pitted) - Smooth -	PIPE CONDITION (Cir
(Circle One) - Bank Run - Cinders - Ro	SOIL CONDITION (Cir
& JOINT C. I.P., LEADITE	
Pha/T 3'X5' CUT DEPTH 4' 0.D. 9.30	PAVING ASphal
BRANCH (House No.) MA	MAIN TO BOX NEAREST
Ridge Rd.	CREW NO. B. KM
LOCATION 193-S' E. SRA FH. W NEW WORK	PERMIT NO.
2944 .E. GA/brAiTh DATE 3-36-80 JOSE Pipe	HOUSE NO. & STREET
UNDERGROUND REPORT L E A K	

4	<u>/</u> 1	1	17	e other side for sketch if necessary. Check here	Use
er 1	- Gils	4.4	Foreman:	Foren	
6	Lallon	0 2	4 75	Duration - 1/2- Hours, Approx. Leakage - 44	
Cized	9	717e	Thice	Remarks (Include type of repair; descr. of break) Litculat Crack Office /- 8" Leak Claup To make tepair. Approx. 11/2" Otit	Rema
•		3		reason for exc.	Other
		damage	of	s there construction in area? Yes (No) By whom? Extent	Was
	Crack -	Spigot		C161/61	
ł		Other_	Brass - 0	12/77/73 D: Copper - Lead -	a life
H	Curb Cock -Other	uxb Cc	Ferrule - C	Date Time Service Branch Leak (Circle One) - Tapping Saddle -	Main
I		Type)	(Size & Ty	REASON FOR EXCAVATION - Branch Installation (Size) Connection (Size	RE A
				LOCATION OF OTHER UTILITIES IN EXCAVATION /Vone	T0C7
Ü	: Yes No	Thickness:	I .	Cement Lined: - Yes No Irregular Wall	
		ne.	ıt - None	Inside: Tuberculation - Heavy - Medium - Light	
1	,		Other	CONDITION (Circle One) - Outside: - Badly Pitted - Pitted - Smooth -	PIPE
!			Other	CONDITION (Circle One) - Bank Run - Cinders - Rock - Clay - Fill - Dirt	SOIL
i				PE OF PIPE & JOINT COST Thou	TYPE
l			0.D.	PAVING ASPhs/T (6'X3') DEPTH 48"	PAV
	SIZE	S. PIPE		MAIN TO BOX NEAREST BRANCH (House No.) MAIN TO C/L /O (Direction)	MAI
L	n. Other	. Conn	Install.	NO. C. Lewis F.H. W. Ridge Rd.	CREW
	ORK	W C	N E W	PERMIT NO. LOCATION S-S Galbraith Rd. 18'E.	PER
ר	Branch	Pike	Joint	NO. & STREET 2944 Galbraith 12d. DATE 12-17-73	HOUSE
ئـــا	K		ΙE	ODE STORY	
	ONE		CLE		

1 7 7 800		unaergrouna Keport		Report No.
House No. & Street: -/- () () (38/10)		Neighb	Neighborhood:	Date 6-17-05
Pipe Size:	Depth: 48	Cement Lined	YN/U Polywrapped - YN/U	Crew Ticket No.05 -064/130 - 00
Main to Box, Nearest Branch: 10, /	House No.	o. & Street:		Main to C/L: SMEIN to CH
I. Existing Conditions/Materials: (Circle no more than two in each category)	han two in each category)			l. Existing Conditions/Materials: (Circle no more than two in each category)
Pavement Types Excavated Material 1 Concrete 1 Bank Run/Gravel	Pipe Material	Joint Types	Pipe Condition-Outside	Branch Material
ω _N 3	2 Steel 3 Ductile Iron	2 Mechanical Joint 3 Thadite	02 Pitted	1 Copper 2 Lead 3 Galvanized Charleton Inc.
ype (gravel) 5		4 Compression Joint 5 Flange	04 Not Visible 05 Other-See Below	4 Brass 5 Plastic
o soo (5, birt 7 Sidewalk 7 Sandy Soll 8 Driveway 8 Other-See Relow	6 Copper 7 Plastic 8 Not Vicible	6 Not Visible 7 Olher-See Below	ii n	6 Cast Iron 7 Ductile Iron
a Below			13 Light Tuberculation 14 No Tuberculation 15 Not Visible	CB/Does Not Apply 9 Other-See Below
II. Utilities In Excavation: (Circle) (None 1 Sewer	r 2 Gas 3 Electric 4 Telephone	5 T.V. Cable 6 Car Rails 7	7 Other	
Wedstire Hens: (Sketch on back — Y/N)	:	3 New Installation* 4 Abandonment*	ıt" ('Drawing on back — Y/N)	
Main Break/Joint Leak Type	(Circle One Loak Type	Circle One 1224 Type and One Repair Type From The Following Categories)	om The Following Categories) Fire Hydrant Leak Type	
		31 11	31 Inside Lead Leak	41 Ferrule
	23 Defective Valve	33 H	33 Hydrant Valve	42 Stop Cock 43 Inside Pipe Leak
15 Rusted Bolts 19 Other-See Below 16 Bad Gasket/jt. material	29 Other-See Below	39 0	39 Other-See Below	44 Outside Pipe Leak 45 Service Saddle 49 Other-See Below
Type	Valve Repair Type 01 Replace Existing Valve 02 Replace Cap	01 Fire	Fire Hydrant Repair Type 01 Renew Existing Lead 02 Replace Existing F.H. Valve	Branch Repair Type 01 Repair 02 Replace
ing *98 Abandon I	placement	ıt In" 90	'90 Install New F.H., Lead and Valve	*90 New Branch Installation
05 Repour Lead 99 Other-See Below 06 Replace Bolts 07 Replace fitting/cplg. 08 Tighten Coupling	05 Repack Stuffing Box Nev 06 Replace Seal Plate '98 Ab: 07 Replace Stem 99 Oth 08 Replace Gears	96.	98 Abandon F.H., Lead and Valve 99 Other-See Below	'98 Abandon Branch 99 Olher-See Below
Structure:	Structure:	Stru	Structure;	Structure:
Code:	Code:	Code:	le:	Code:
Remarks/Other: 26 8 DTF				

4/90 BEYR

Crew Leader/Field Supervisor #1/1 // // //

7000	Underground Report	>	Report No.
Location: W T (1)	+00 N+ 100 111	Neighborhood: (API)	Date 11/02/01
Pipe Size: 811 0.D.:	Depth: 4 5 Cement Lined		Crew Ticket No.
Main to Box, Nearest Branch:	House No. & Street:	1	Main to C/L:
1. Existing Conditions/Materials: (Circle no more than two in each category	l. Existing Conditions/Materials: (Circle no more than two in each category)		Code:
Pavement Types Excavated Material	Pipe Material Joint Types	ypes Pipe Condition-Outside	Branch Material
ט נט בי) ₂ <u>-</u>	01 Badly Pitted 1 02 Pitted 2	1 Copper 2 Lead
Asphalt/Stone (mac) 4	4 Concrete 3 Leadite 4 Compression Joint	03)Smooth 3 04 Not Visible 4	Galvanized Steel/Black Iron Brass
5 Low Type (gravel) 5 Fill 6 Sod (6)Dirt	5 Asbestos Cement (Transite) 5 Flange 6 Copper 6 Not Visible	05 Other-See Below 5	Plastic
7 Sidewalk 7 Sandy Soll 8 Driveway 8 Olher-See Relow	<u>.</u>	11 Heavy Tuberculation	
Other-See Below	9 Other-See Below	12 Medium Tuberculation 9 in 14 No Tuberculation 9 in 14 No Tuberculation	9 Other-See Below
		15 Not Visible 16 Other-See Below	N.
II. Utilities In Excavation: (Circle Done 1 Sewer	2 Gas 3 Electric 4 Telephone 5 T.V. Cable	6 Car Rails 7 Other	
Measurements: (Sketch on back — Y/N)			
III. Iviaintenance: (Circle one) 1 Break 2 Leak - Jo	2 Leak - Joint, Valve, Fire Hydrant, Branch 3 New Installation* 4 Abandonment* (*Drawing on back — (Circle One Leak Type and One Repair Type From The Following Categories)	Abandonment* (*Drawing on back — Y/N) Type From The Following Categories)	
Main Break/Joint Leak Type 11 Circular Crack	Valve Leak Type 21 Stuffing Box	Fire Hydrant Leak Type	Branch Leak Type
13 Bell Crack 17 Coupling/Clamp	Bonnet		41 Ferrule 42 Stop Cock
Hole 18	29 Other-See Below	39 Other-See Below	43 Inside Pipe Leak 44 Outside Pipe Leak
16 Bad Gasket/jt. material			45 Service Saddle 49 Other-See Below
Main/Joint Repair Type 01 Caulk Joint	Valve Repair Type 01 Replace Existing Valve	Fire Hydrant Repair Type 01 Renew Existing Lead	Branch Repair Type
Joint *90	02 Replace Cap 03 Replace Bonnet/Stern	02 Replace Existing F.H. Valve 03 Replace Existing F.H. Valve & Lead	02 Replace
05 Repour Lead 99 Other-See Below	Bolt Replacement '90 Repack Stuffing Box	lew F.H., Lead and n F.H., Lead and Va	'90 New Branch Installation '98 Abandon Branch
07 Replace fitting/cplg. 08 Tighten Coupling	05 Replace Seal Plate "98 Abandon Valve 07 Replace Stem 99 Other-See Below 08 Replace Gears	99 Other-See Below	99 Other-See Below
Structure:	Structure:	Structure:	Structure:
Code:	Code:	Code:	Code:
Remarks/Other:	and and all	me donne	20 73/12/0m
2 compliano		what we wanted to	11 60 0 1014

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Crew Leader/Field Supervisor

LOCATION 36 W of 2 W FIX W CONTROL PIPE SEGMENT No. YEAR PIPE INSTALLED MAIN TO BOX NEAREST BR. .. WATER: POLITICAL SUBD ╗ REMARKS CONSTRUCTION IN AREA: Y/N INSTALLATION TYPE: REPAIR TYPE: LOCATION OF OTHER UTILITIES IN EXCAVATION BOX IS CHECKED SEE SKETCH ON OTHER SIDE BRANCH: SERVICE CEMENT LINED: Y/N BRANCH SIZE REPAIR: MANHOURS CINCINNA'I'I WA'I'EK WORKS KEPAIR UNDERGROUND REPORT BREAK: TEMP. BRANCH BREAK: Y/N VEMONIA LINES JOS SIZE CONNECTION (SIZE & TYPE) FIRE HYDRANT: Y/N PRESS. PIPE MATERIAL / L MAILKIAL JOINT TYPE MAIN LEAK TYPE COND.: OUTSIDE OF INSIDE 1-3 POLY WRAPPED: Y/N VALVE I FAIR DEPTH PAVEMENT TYPE COST SOIL: TYPE SMOHM AB BRANCH MATERIAL COORD OVHD. USE: CITY RESTORATION: MANHOURS FIELD TRACT __ SUPRV. Color SERVICE BRANCH: Y/N Dilling Sold _EXCAVATED MATERIAL 3 5 BLOCK _ TYPE __ BRANCH LEAK TYPE _E COORD CORROSION N.8.02 CREW ID 2027 _DATE 12/4/89

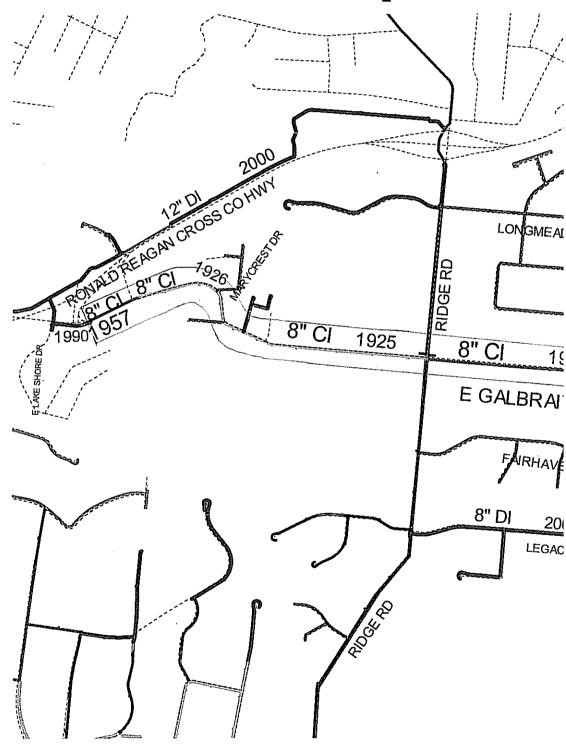
		YOS Flash Fill	3,32 7
	clarp.	e 8" full circle hogy	Hemarks/Other: (refin instabled
Code:	Code:	Code:	Code:
Structure:	Structure:	Structure:	Structure:
Branch Repair Type 01 Repair 02 Replace 03 Disconnect *90 New Branch Installation *98 Abandon Branch 99 Other-See Below	Fire Hydrant Repair Type 01 Renew Existing Lead 02 Replace Existing F.H. Valve 03 Replace Existing F.H. Valve & Lead '90 Install New F.H., Lead and Valve '98 Abandon F.H., Lead and Valve 99 Other-See Below	Valve Repair Type 01 Replace Existing Valve 02 Replace Cap 03 Replace Bonnet/Stem 04 Bolt Replacement '90 Install, "Cut In" 05 Repack Stuffing Box New Valve 06 Replace Seal Plate '98 Abandon Valve 07 Replace Stem 99 Other-See Below 08 Replace Gears	Main/Joint Repair Type 01 Caulk Joint BR Caulk & Clamp Joint Coupling Subandon Pipe/Fitting Coupling Subandon Pip
Branch Leak Type 41 Ferrule 42 Stop Cock 43 Inside Pipe Leak 44 Outside Pipe Leak 45 Service Saddle 49 Other-See Below	Fire Hydrant Leak Type 31 Inside Lead Leak 32 Outside Lead Leak 33 Hydrant Valve 39 Other-See Below	Valve Leak Type 21 Stuffing Box 22 Bonnet Bolts 23 Defective Valve 29 Other-See Below	Main Break/Joint Leak Type 1) Circular Crack 12 Longltudinal Crack 13 Bell Crack 14 Corrosion Hole 15 Rusted Bolts 19 Other-See Below 16 Bad Gasket/jt. material
	ils 7 Other	None 1 Sewer (2 Gas) 3 Electric 4 Telephone 5 T.V. Cable 6 Car Rails 7 Other	II. Utilities In Excavation: (Circle) 0 None 1 Sewer
Code: Branch Material Copper Lead 3 Galvanized Steel/Black Iron 4 Brass 5 Plastic 6 Cast Iron 7 Ductile Iron 8 Does Not Apply 9 Other-See Below	Pipe Condition-Outside 01 Badly Pitted 02 Pitted 03 Smooth 1 C C C C C C C C C C C C C C C C C C C	Existing Conditions/Materials: (Circle no more than two in each category) Pavement Types Excavated Material Pipe Material Joint Types Pipe Condition-Outside Branch Material Copper Branch Material Copper Branch Material Copper Conders Cinders Cind	I. Existing Conditions/Materials: (Circle no more than two in each category) Pavement Types 1 Bank Run/Gravel 2 Cinders 2 Rock 3 Asphalt/Concrete 4 Asphalt/Stone (mac) 4 Asphalt/Stone (mac) 5 Fill 6 Sod: 7 Sandy Soil 8 Other-See Below 9 Other-See Below Cut Size: Excavated Material Pipe Material 2 Steel 3 Ductile tron 4 Concrete 5 Asbestos Cemen 6 Copper 7 Sandy Soil 7 Plastic 8 Other-See Below 9 Other-See Below 9 Other-See Below
Crew Ticket No. 136 dd 1700	Permit No. Polywrapped - YADU	Depth: 4411 Cement Lined -	Pipe Size: \$ 11 O.D.:
. I 🔄	<u>ă.</u> 	Underground Report	House No. & Street: 3301

4/90 BEYR

Crew Leader/Field Supervisor

Munch / Aps /

Galbraith Roa Replacen



		;	
House No. & Street: 1000 1000 1000 1000 1000 1000 1000 10	Design of	Neighborhood:	Date 1-26-05
Location: TX E I FH E	OF String Valley	Permit No.	Crew Ticket No. QS 125 23 24
Pipe Size: O.D.:	Depth:Ceme	Cement Lined - Y/N/20) Polywrapped - Y/N/20	
Main to Box, Nearest Branch:	House No. & Street:	\	Main to C/L:
. Existing Conditions/iVaterials: (Circle no more than two in each category)	two in each category)		Cc.le.
Pavement Types Excavated Malerial	iai	Joint Types Pipe Condition-Outside	Branch Material
Concrete 1 Bank Run/Gravel Block Paved 2 Cinders	(1 Cast Iron 1 Lead 2 Steel 2 Machanic	01 Badly Pitted	1 Capper
ຜ 1	3 Ducilie Iron 3 Leadite	03 Smooth 3	2 Lead 3 Gaivanized Steel/Riack Iron
Asphalt/Stone (mac) Low Type (gravet) (5)Fill	4 Concrete 4 Compression Joint 5 Asbestos Cement (Transite) 5 Flance	04 Not Visible 4	
€	Copper	Pipe Condition-Inside 6	Plastic Cast Iron
Driveway 8 Other-See Below	8 Not Visible	11 Heavy Tuberculation 12 Medium Tuberculation (7 Ductile fron 8)Does Not Apply
out Size: 6 X6	א מוופו מאפר מאומא	13 Light Tuberculation 9 14 No Tuberculation (15 Not Visible 16 Other-See Below	9 Other-See Below
I. Utilities In Excavation: (Circle) Jone 1 Sewer 1 Se	3 Electric 4 Telephone 5 T.V. Cable	6 Car Rails 7 Other Osc 700 Ocu	COM
ll. Maintenance: (Circle one) 1 Break (2) eak - Joint, Valve, Fire Hydrant, Branch (Circle One !:	<u> </u>	New Installation* 4 Abandonment* (*Drawing on back — Y/N) Type and One Repair Type From The Following Categories)	
Leak Type	I	Fire Hydrant Leak Type	Branch Leak Type
12 Longitudinal Crack 22	21 Stuffing Box 22 Bonnet Bolts	31 Inside Lead Leak	41 Ferrule
17 Coupling/Clamp	23 Defective Valve		43 Inside Pipe Leak
15 Rusted Bolts 19 Other-See Below 16 Bad GaskeVjt. material	29 Other-See Below	39 Other-See Below	44 Outside Pipe Leak 45 Service Saddle 49 Other-See Below
in/Joint Repair Type Caulk Joint	Valve Repair Type 01 Replace Existing Valve	Fire Hydrant Repair Type Of Renew Existing Lead	Branch Repair Type 01 Repair
*90 Install New Pipe/Fitting	02 Replace Cap 03 Replace Bonnel/Stem	02 Replace Existing F.H. Valve & Lead	02 Replace
ing '98 Abandon Pipe/Fitting	Bolt Replacement '90	Install New F.H., Lead and	*90 New Branch Installation
29 Other-See Below 05 26 Replace Bolts 06 27 Replace fitting/cplg. 07 28 Tighten Coupling 08	05 Replace Stuffing Box New Valve 06 Replace Seal Plate *98 Abandon Valve 07 Replace Stem 99 Other-See Below 08 Replace Gears	'98 Abandon F.H., Lead and Valve 99 Other-See Below	*98 Abandon Branch 99 Other-See Below
tructure:St	Structure:	Structure:	Structure:
ode: Cc	Code:	Code:	Code:
emarks/Other:			
emarks/Other:			

4/90 EMEYR

Use other side for sketch if necessary. Check here	Foreman: AMM	Remarks (Include type of repair; descr. of break) BOLF RUSTED OFF 8X 3" SEPUICE SADDLE	Was there construction in area? Yes (No By whom? Extent of damage Other reason for exc.	On Main Break (Circle One) Cir.Crack - Long crack - Bell Crack - Spigot Crack - Other	Date Time Service Branch Leak (Circle One) - (Tapping Saddle) - Ferrule -		Inside: ' Tuberculation - Heavy - Medium - Light - None Cement Lined: - Yes No Irregular Wall Thickness: Yes No	(Circle One) - Outside: - Badly Pitted - Pitted - Smooth		PAVING 17, 2017 10 0.D. DEPTH 58 0.D.	MAIN TO BOX NEAREST BRANCH (House No.) MAIN TO C/L//, H (Direction) PIPE SIZE 8"	LARK	PERMIT NO. LOCATION 8/ W / St / / E NEW WORK	HOUSE NO. & STREET 3369 (SALBRIATH DATE G-3/-70 Joint Pipe Broken	UNDERGROUND REPORT LEAK LEAK
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